

January 31, 2003

Mr. Seth Ausubel
Remedial Project Manager
United States Environmental Protection Agency
Region II
Emergency and Remedial Response Division
290 Broadway, 19th Floor
New York, NY 10007-1866

Re: US Ink's Response to EPA's Request for Information
Regarding the Berry's Creek Study Area

Dear Mr. Ausubel:

This letter responds to the October 17, 2002 Request for Information ("Request") submitted by the United States Environmental Protection Agency ("EPA") to United States Printing Ink Corporation ("USPI"). The Request seeks information pertaining to the Berry's Creek Study Area ("Study Area") in Bergen County, New Jersey, specifically the US Ink facility located at 343 Murray Hill Parkway ("Murray Hill Parkway Facility" or "Facility"). US Ink, a Division of Sun Chemical, responds to the Request on behalf of USPI. US Ink requested and was granted by Clay Monroe of the Office of Regional Counsel an extension until January 24, 2003 to respond to the Request.

General Objections

US Ink asserts the following general objections to the Request.

Time for Response. US Ink objects to the time allowed by EPA to respond to the Request, as such time is insufficient, given the breadth of the questions, the volume of documents that must be searched, and the extended time period for which information is sought.

The Request is Overly Broad and Unduly Burdensome. US Ink objects to the Request because the scope of the Request is so overbroad and burdensome that it simply cannot be justified. First, the Request calls for information that is not related to the Study Area or the Murray Hill Parkway Facility. Second, the Request seeks information regarding activities at a level of detail that is impossible to provide without extreme burden, if at all. The activities that are the subject of the Request may have taken place ten, twenty or more



years ago. Many of the individuals who may have limited knowledge regarding some of the activities to which the Request refers are no longer – or were never – employed by US Ink. Those individuals who are currently employed by US Ink do not have knowledge at the level of detail requested. Third, the Request is not limited to a specific time frame and is therefore completely overbroad. For example, it is impossible for US Ink to recount each and every activity and each and every material used at the Facility for an undefined period of time. Fourth, much of the information sought by the EPA is duplicative of information already in EPA's possession, custody and/or control and, to that extent, is burdensome. The Berry's Creek Study Area has been the subject of investigation by EPA for a significant period of time.

Privileged Information. US Ink further objects to the Request to the extent it seeks information protected from disclosure by the attorney-client privilege, the attorney work product doctrine, the joint defense privilege and any other legally cognizable privilege.

The Request Exceeds the Scope of EPA's Authority. In several respects, the Request exceeds the scope of EPA's authority granted under Section 104(e). Specifically, to the extent that the Request seeks information not related to the hazardous substances that are alleged to be connected with the Study Area, seeks information concerning operations at a facility other than the Murray Hill Parkway Facility without regard to whether such activities are relevant to the Study Area, seeks information pertaining to corporate structure relating to entities without any connection to the Study Area, and seeks a certification as related to this response, the Request is overly broad and exceeds EPA's authority under Section 104(e).

Objections to Definitions

US Ink further submits the following objections to the Definitions contained in the Request.

"The Company" and "Your Company." This definition is overly broad because of the requirement to identify each "subsidiary or affiliate," the "name(s) and address(es) of each such entity's President, Chairman of the Board, and Chief Executive Officer," as well as "the state and date of incorporation and the agent for service of process" for each such entity regardless of whether the subsidiary, division or branch had any relationship with the Study Area or Facility. US Ink responds to the questions below for the Murray Hill Parkway Facility. US Ink has not included in this response any information pertaining to other US Ink or Sun Chemical facilities or to facilities which are clearly irrelevant to the Request.

"Waste" or "Wastes." This definition is overly broad, vague and ambiguous and exceeds the scope of material regulated pursuant to CERCLA. Further, the definition is objectionable as a compound statement from which an affirmative response as to one characteristic or component of the definition might be construed to include all such characteristics or components. In responding to EPA's Request, US Ink reserves all arguments concerning the nature of the material used by it.

“Industrial Waste.” This definition is overly broad, vague and ambiguous and calls for speculation. Further, the definition is objectionable as a compound statement from which an affirmative response as to one characteristic or component of the definition might be construed to include all such characteristics or components. In responding to EPA’s Request, US Ink expressly reserves all arguments concerning the nature of the material used by it.

Response to the Request

Without waiving its general or specific objections, US Ink responds to the Request as follows:

1. (a) State the correct legal name and mailing address of your Company.

US Ink, a Division of Sun Chemical Corporation, 651 Garden Street, Carlstadt, New Jersey 07072.

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- (b) Identify the legal status of your Company (corporation, partnership, sole proprietorship, specify if other) and the state in which your Company was organized or formed.

US Ink is an unincorporated division of Sun Chemical Corporation (“Sun”). Sun is a corporation organized in the State of Delaware.

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- (c) State the name(s) and address(es) of the President, Chairman of the Board, and the Chief Executive Officer of your Company.

Wes William Lucas, President, CEO and Chairman of the Board, Sun Chemical Corporation, 222 Bridge Plaza South, Fort Lee, New Jersey 07024

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- (d) If your Company is a subsidiary or affiliate of another corporation, or has subsidiaries, identify each such entity and its relationship to your Company, and state the name(s) and address(es) of each such entity’s President, Chairman of the Board, and Chief Executive Officer.

US Ink specifically objects this question as overbroad because it requests information about entities that had no relationship with the subject Site. As noted above, US Ink is an unincorporated division of Sun; Wes William Lucas is the President, CEO and the Chairman of the Board of Sun.

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- (e) Identify the state and date of incorporation and the agent for service of process in the state of incorporation and in the State of New Jersey for your Company and for each entity identified in your response to question 1.d., above.

See response to 1(b) above. Sun Chemical Corporation was incorporated in Delaware. It's agent for service of process in Delaware is CT Corporation.

(f) If your Company is a successor to, or has been succeeded by another entity, identify such other entity and provide the same information requested in question 1.e., above.

Sun Chemical Corporation acquired United States Printing Ink, Inc. from Millmaster Onyx Group, Inc. on January 21, 1993. US Ink prepared this response on behalf of itself and United States Printing Ink.

2. Provide a description of the Site, i.e., the property or properties in East Rutherford, Bergen County, New Jersey, which your Company owned or owns, or upon which it operated or leased, or currently operates or leases. Include Block and Lot numbers, names of streets or physical features bounding the property(ies), and acreage.

The US Ink facility for which this Request seeks information is located at 343 Murray Hill Parkway, East Rutherford, New Jersey ("Site"). The Site is also known as Block 106.A, Lot 4.C on the Borough of East Rutherford Tax Map. The Site is approximately 3.5 acres. The Site fronts Murray Hill Parkway and is between Whelan Avenue to the north and Branca Road to the south.

3. Provide a narrative description of the nature of the Company's business. If the nature of the Company's business changed over time, please explain how it changed (including any name changes) and approximately when the changes occurred.

The 343 Murray Hill Parkway Site manufactures and blends black and color water-based and oil-based printing ink. The manufacturing process is as follows: raw materials (such as carbon black or flushed color, varnish, petroleum oil and/or vegetable oil) are mixed in process vessels with the mechanical mixers according to specific formulations. When the mixing is complete, the product is filtered through a cloth bag filter to remove undesired particulate matter (grind). The grind is tested and, if necessary, the product is passed through a mill to produce the desired result. Oil-based inks are milled on a 3-roll mill while water-based inks are milled on a shot mill. One pass through the mill is sufficient to set the grind and the material is then packaged in suitable containers for shipment to the customer. In the case of blended inks, finished inks are mixed in process vessels or packaging containers according to precise formulations to produce specific shaded colors for the customers.

The plant also stores ink produced at other US Ink facilities for subsequent packaging and shipment to customers. Research and development ("R&D") of inks was conducted from approximately the time operations began at the Facility until the end of 1994. R&D activities included the evaluation of raw materials as well as the development and scale-up of new formulations.

4. Please specify the time period during which the Company leased, owned, and/or operated the Site. If the Company leased, owned or operated at portions of the Site, specify the time periods of such involvement, and appropriate block and lot numbers. If your Company ever leased the Site, provide copies of leases, names, current addresses and telephone numbers of each owner of the Site during the period the Company leased the Site.

US Ink specifically objects to this question as overbroad and beyond the permissible scope of inquiry under Section 104(e) of CERCLA. Subject to and without waiving its objections, US Ink responds that, in 1967, United States Printing Ink Corporation ("USPI") began operating at its newly constructed facility at 343 Murray Hill Parkway in East Rutherford, New Jersey. In 1968, USPI was purchased by Millmaster Onyx Corporation, which was subsequently purchased by Kewanee Industries ("Kewanee") in 1976. Kewanee was acquired by Gulf Oil Corporation ("Gulf") in 1977. On December 22, 1982, Millmaster Onyx Group, Inc. acquired the USPI facility from Gulf. On January 21, 1993, Sun Chemical Corporation acquired Millmaster Onyx Group, and US Ink Corporation became a subsidiary of Sun. In 1997, US Ink Corporation was merged into Sun, and US Ink became an unincorporated division of Sun.

5. Describe the Site at the time the Company took possession of it. If there was any business at the Site, explain the nature of that business.

US Ink specifically objects to this question as overbroad and beyond the permissible scope of inquiry under Section 104(e) of CERCLA. Subject to and without waiving its objections, see response to question 4 above.

6. Describe in detail the nature of the relationship between the Company and the following entities: (1) U.S. Ink; (2) Sun Chemical Corporation. Indicate the time and manner in which the relationships were established. Specifically address the relationships as pertaining to any current or past operations or ownership at the Site.

US Ink specifically objects to this question as overbroad and beyond the permissible scope of inquiry under Section 104(e) of CERCLA. Subject to and without waiving its objections, US Ink responds that Sun acquired United States Printing Ink, Inc. from Millmaster Onyx Group, Inc. on January 21, 1993. US Ink is an unincorporated division of Sun Chemical Corporation.

7. Describe in detail the nature of the activities conducted by the Company at the Site from the time the Company began operations at the Site until the present time, including:

- (a) the services performed at the Site;
- (b) all products which the Company manufactured, supplied, or sold which resulted from activities at the Site;

- (c) research and development activities; and
- (d) the time period during which those activities occurred.

Sun specifically objects to this question as overbroad and beyond the permissible scope of inquiry under Section 104(e) of CERCLA. Subject to and without waiving its objections, see response to question 3. Additionally, oil-based and water-based black and color printing inks have been manufactured at the Site since the Site first opened in 1964. The Site manufactured UV curable inks for a brief period in or around from approximately 1974 to 1984.

8. Did your Company cease operations at the Site? If so, when? Describe the circumstances that precipitated your Company's decision to cease operations at the Site.

US Ink continues to operate at the Site.

9. Did your company generate hazardous wastes at the Site, or does your company currently do so? Please describe your company's treatment, storage and/or disposal practices for any hazardous wastes generated at the Site.

The Company has, from time to time, generated hazardous wastes. Hazardous wastes generated were sent off site as indicated in response to question 13. Additionally, under prior ownership the Site was a permitted hazardous waste storage facility from approximately 1980 through 1989.

10. Provide a list of all local, state and federal environmental permits ever granted for the Site or any part thereof (e.g., RCRA permits, NPDES permits, etc.)

US Ink specifically objects to this question as overly broad and unduly burdensome because it is so broad in temporal scope that it is utterly unjustified. Subject to and without waiving its objections, US Ink responds that it has been issued the following permits:

EPA (Federal)	NJD095171948
NDEP (Air)	043644
NJDEP (Air)	043645
NJDEP (Air)	043646
Borough of E. Rutherford	2007
NJDEP (Air)	Cert. # 76289
NJDEP (Air)	Cert. # 76786
NJDEP (Air)	PCP960004
NJDEP (Air)	PCP960005
NJDEP (Air)	PCP960001
NJDEP (Air)	Cert. # 120415

NJDEP (Air)	Cert. # 043644
NJDEP (Air)	Cert. # 043645
NJDEP (Air)	Cert. # 043646
NJDEP (Air)	PCP960006
NJDEP (Air)	PCP010001
NJDEP (Air)	PCP010003
NJDEP (Air)	PCP020001
NJDEP (Storm Water Discharge)	NJG01112747
NJDEP (Discharge Permit)	NJG0003646 (Non-contact cooling water)
NJDEP (Water Connection Permit)	0796

11. List all hazardous substances (as defined in the "Instructions"), which were, or are, used, stored, or handled at the Site.

US Ink specifically objects to this question to the extent it seeks information regarding each and every hazardous substance that was or is currently used at the Facility. Such a request is overly broad and unduly burdensome given the unlimited time frame for which information is sought. US Ink further objects to this question to the extent it seeks information regarding past operations at a level of detail that is impossible to provide. For example, US Ink cannot determine the identity and quantity of each and every hazardous substance used at the Facility in years past. Subject to and without waiving its objections, US Ink responds as follows:

SUBSTANCE	WHEN USED	WHERE USED & STORED	AVERAGE AMOUNT ON HAND (approx.)
Chromium compounds	Prior to 1985	Used in the color manufacturing room; stored in the warehouse.	Unknown
Copper compounds	Continually	Used in the color manufacturing room; stored in the warehouse.	8,000 lbs.
Lead compounds	Prior to 1985	Used in manufacturing room; stored in the warehouse.	Unknown
Mercury	Prior to 1/31/01	Stored and used in the laboratory.	1 pint
Mercury	Continually	Used in thermostats and lab thermometers.	<1 lb.

Sodium hydroxide	From approximately 1982 to present	Used in the manufacturing of water-based inks; stored and used in the water-based ink manufacturing area.	1,000 lbs.
Phosphoric acid	Prior to 1998	Was stored in plastic drums various areas inside the plant until 2003.	100 lbs.
Petroleum oils	Continually	Used in the black ink manufacturing room and color ink manufacturing room; stored throughout the plant.	2,500,000 lbs.
Manganese Compounds	Prior to 1997	Used in the manufacture of sheet-fed ink; stored inside.	Unknown
Glycol Ethers	Prior to 1992	Used in black and color manufacturing rooms; stored inside warehouse	Unknown
Trisodium Phosphate (TSP)	Prior to 1992	Used to develop Alkemex 90 (a fountain solution); stored in warehouse	Approx. 200 lbs.

NOTE: Chemicals that may be present at trace levels in materials handled may not be included.

The following chemicals were used in the Research and Development Lab until July 1982, when US Ink ceased using and storing these materials and properly disposed of all of the materials through a licensed hazardous waste hauler.

SUBSTANCE	WHEN USED	WHERE USED & STORE	AVERAGE AMOUNT ON HAND (approx. lbs.)
Ammonium chloride	Until July 1982	R&D Analytical Lab	5
Ammonium thiocyanate	Until July 1982	R&D Analytical Lab	1
Asbestos	Until July 1982	R&D Analytical Lab	1
Benzoic acid	Until July 1982	R&D Analytical Lab	1
Ferric nitrate	Until July 1982	R&D Analytical Lab	1
Hydrogen cyanide	Until July 1982	R&D Analytical Lab	2
Nickel compounds (besides nickel nitrate)	Until July 1982	R&D Analytical Lab	1
Nickel nitrate	Until July 1982	R&D Analytical Lab	1
Potassium cyanide	Until July 1982	R&D Analytical Lab	1
Pyrene	Until July 1982	R&D Analytical Lab	0.5
Resorcinol	Until July 1982	R&D Analytical Lab	1
Sodium	Until July 1982	R&D Analytical Lab	2.5
Sodium cyanide	Until July 1982	R&D Analytical Lab	1

12. State when and where each substance identified in your response to Question 11 was, or is, used, stored, or handled at the Site and the volume of each substance.

US Ink specifically objects to this question to the extent it seeks information regarding each and every hazardous substance that was or is currently used at the Facility. Such a request is overly broad and unduly burdensome given the unlimited time frame for which information is sought. US Ink further objects to this question to the extent it seeks information regarding past operations at a level of detail that is impossible to provide. For example, US Ink cannot determine the identity and quantity of each and every hazardous substance used at the Facility in years past. Subject to and without waiving its objections, see response to question 11.

13. Describe in detail how and where the hazardous wastes, industrial wastes, and hazardous substances generated, handled, treated, and stored at the Site were, or are, disposed of. If any hazardous wastes, hazardous substances, or industrial wastes were, or are, taken off-site for disposal or treatment, state the names and addresses of the transporters and the disposal facility used.

US Ink specifically objects to this question to the extent it seeks information regarding the disposal method, transporters and disposal facility of all wastes generated at the Facility. Such a request is overly broad and unduly burdensome given the unlimited time frame for which information is sought. US Ink further objects to this question to the extent it seeks information regarding past operations at a level of detail

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that is impossible to provide. Subject to and without waiving its objections, US Ink responds that the following haulers and facilities have been used to dispose of the Murray Hill Facility's hazardous waste.

Year	Transporter Name	Facility Name	Address
1989	Casie Enterprise/Protank	Casie Ecology Oil Salvage	3209 N. Mill Road Vineland, NJ 08360
1990	Casie Enterprise/Protank	Casie Ecology Oil Salvage	3209 N. Mill Road Vineland, NJ 08360
1991	Casie Enterprise/Protank	Casie Ecology Oil Salvage	3209 N. Mill Road Vineland, NJ 08360
	Delaware Container Co. Inc.	Delaware Container Co., Inc.	W. 11th Ave. & Valley Rd. Coatesville, PA 19320
1992	John Pfrummer, Inc.	Enviro Safe Services of Ohio, Inc.	876 Otter Creek Road Oregon, OH 43616
	Casie Enterprise/Protank	Casie Ecology Oil Salvage	3209 N. Mill Road Vineland, NJ 08360
	Merola Enterprises, Inc.	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	Casie Enterprise/Protank	E.I. Dupont de Nemours & Co., Inc.	Chambers Works – Rt. 130 Deepwater, NJ 08023
1993	Merola Enterprises, Inc.	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	Casie Enterprise/Protank	Casie Ecology Oil Salvage	3209 N. Mill Road Vineland, NJ 08360
1994	Auchter Industrial Vac Service	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	Clean Harbors Env. Services, Inc.	Clean Harbors of Braintree, Inc.	385 Quincy Ave. Braintree, MA 02184
1995	Auchter Industrial Vac Service	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	John Pfrummer, Inc.	Enviro Safe Services of Ohio, Inc.	876 Otter Creek Road Oregon, OH 43616
1996	Auchter Industrial Vac Service	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	Liowetti Oil Recovery	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
	Clean Harbors	Clean Harbors of Braintree, Inc.	385 Quincy Ave. Braintree, MA 02184
1997	Ashland Chemical Corp.	Ashland Chemical Company	3 Broad Street Binghamton, NY 13902
	Freehold Cartage Inc.	E.I. Dupont de Nemours & Co.	Chambers Works – Rt. 130 Deepwater, NJ 08023

Year	Transporter Name	Facility Name	Address
	Auchter Industrial Vac Service, Inc.	S & W Waste, Inc.	105 Jacobus Ave. South Kearny, NJ 07032
1999	Ashland Chemical Co.	Marisol, Inc.	125 Factory Lane Middlesex, NJ 08846
	Environmental Transport Group	Marisol, Inc.	125 Factory Lane Middlesex, NJ 08846
2000-Present	Ashland Chemical Co.	Marisol, Inc.	125 Factory Lane Middlesex, NJ 08846
	Clean Harbors of Braintree	Clean Harbors of Braintree	1 Hill Ave. Braintree, MA 02184

14. Who determined, or determines, where to treat, store, and/or dispose of the hazardous substances and/or hazardous wastes handled at the Site? Provide the names and current or last known addresses of any entities or individuals which made such determination.

US Ink specifically objects to this question to the extent it seeks information regarding each and every person or entity that determined the location for treatment, storage and disposal of hazardous substances and hazardous wastes, as such a request is overly broad and unduly burdensome, especially given the unlimited time frame for which information is sought. Subject to and without waiving its objections, US Ink responds that the following individuals make, or have made, such determinations:

Thomas Donvito, Regulatory Manager, US Ink, 651 Garden St., Carlstadt, New Jersey 07072

Edwin Caddell, Sr., US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073

Dennis Sweet, US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073

Garry Tiplitz, US Ink, 651 Garden Street, Carlstadt, New Jersey 07072

Robert Schmidt, US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073

Rich Goldbach, deceased

15. Describe in detail the remedial activities conducted at the Site under CERCLA, the Resource Conservation and Recovery Act (RCRA), and/or laws of the State of New Jersey. Describe your Company's involvement in the remedial activities.

The Murray Hill Parkway Facility underwent an ECRA/ISRA cleanup in the late 1980s and early 1990s. Pursuant to a three-phase sampling plan, soil samples were taken and shallow groundwater monitoring wells were installed to define the vertical and horizontal extent of potential contamination of

soils and groundwater. Contaminants of concern were petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylene (collectively "BTEX"), lead and zinc. Remedial action consisted of excavation and removal of contaminated soil. Groundwater monitoring was conducted before and after soil excavation, but groundwater treatment was not necessary. US Ink received a No Further Action Letter from the New Jersey Department of Environmental Protection on June 11, 1993 and on June 29, 1995.

16. Identify all leaks, spills, or releases into the environment of any hazardous substances, pollutants, or contaminants that have occurred, or are occurring, at or from the Site. Specifically identify and address any leaks, spills, or releases to the Berry's Creek Study Area. Identify:

- (a) when such releases occurred;
- (b) how the releases occurred;
- (c) the amount of each hazardous substances, pollutants, or contaminants so released (for substances contained in any sewage effluent from the Site, provide discharge monitoring reports or other data indicating discharge concentrations and loads, as available);
- (d) where such releases occurred;
- (e) where such releases entered the Berry's Creek Study Area, if applicable; and
- (f) the pathway by which such releases entered the Berry's Creek Study Area, including any storm sewers, pipes, or other conveyances discharging to a water body or wetland; or via surface runoff, groundwater discharge, or any spills, leaks, or disposal activities.

On March 23, 1999, a drum spilled from a truck near the Facility on Whelan Road, on Hackensack Street and Union Avenue in East Rutherford, NJ. The release is estimated to have been between 25 to 150 gallons of hydrotreated light naphthenic distillate. The East Rutherford Fire Department responded to the spill by spreading 24 bags of clay absorbent matter on the spill. The East Rutherford Maintenance Department sanded the area in the street. US Ink plant personnel spread clay absorbent material and also used absorbent pads. The East Rutherford Fire and Maintenance Department removed the absorbent materials that they had laid down. The absorbent material that US Ink plant personnel laid down was disposed of in US Ink's industrial waste because the spilled hydrotreated light naphthenic distillate was not a hazardous waste. The Bergen County Health Department observed the clean-up.

17. Please complete the form on page 5, below. Indicate on the form whether each of the chemicals listed has ever been released from the Site to the Berry's Creek Study Area, including creeks, ditches, or other water bodies, or wetlands. Follow all additional instructions on the form. In addition, please answer Question 16, above, specifically addressing any chemicals for which you answered "yes".

See Exhibit A.

18. Identify all companies, firms, facilities, and individuals (hereafter referred to as "customers") from whom your Company obtained, or obtains, materials containing Industrial Waste as defined in Number 6 of the Definitions and whose Industrial Waste was, or is, treated, stored, handled or disposed of at the Site. For each such customer:

(a) Describe the relationship (the nature of services rendered and products purchased or sold) between your Company and the customer;

(b) Provide Copies of any agreements or/and contracts between your Company and the customer;

(c) Provide the name and address of each customer who sent such materials, including contact person(s) within said customer;

(d) Provide shipping and transaction records pertaining to such Industrial Wastes sent by each customer, including but not limited to invoices, delivery receipts, receipt, acknowledging payment, ledgers reflecting receipt of payment, bills of lading, weight tickets, and purchase orders; and

(e) Provide the name and address of all companies and individuals who transported, or transport, Industrial Wastes to the Site.

US Ink specifically objects to this question to the extent it presumes that US Ink obtained Industrial Waste from any customers. Subject to and without waiving its objections, US Ink responds that it occasionally accepted ink from customers. The returned ink typically was at least 95 to 98 percent ink, with some fountain solution and paper fibers and a fraction of a percent of blanket wash. The returned ink would either be recycled or disposed of through a licensed waste hauler. This practice was discontinued in or around 1989. The only customers known to have returned ink to the facility are Westchester Rockland Newspapers and The Rockland Journal.

19. For each customers' Industrial Wastes handled, treated, stored, or disposed of at the Site, describe:

- (i) the volume;
- (ii) the nature;
- (iii) chemical composition;
- (iv) color;
- (v) smell;

- (vi) physical state (e.g., solid, liquid);
- (vii) any other distinctive characteristics; and
- (viii) the years during which each customer's materials were handled, treated, stored, or disposed of at the Site.

US Ink specifically objects to this question to the extent it presumes that US Ink obtained Industrial Waste from any customers. Subject to and without waiving its objections, see response to question 18.

20. Please supply any additional information or documents that may be relevant or useful to identify other companies or sources that sent industrial wastes to the Site.

US Ink specifically objects to this question to the extent it presumes that US Ink obtained Industrial Waste from any customers. Subject to and without waiving its objections, US Ink has no knowledge of industrial wastes being sent to the Site.

21. Please state the name, title and address of each individual who assisted or was consulted in the preparation of your response to this Request for Information and correlate each individual to the question on which he or she was consulted.

Thomas Donvito, Regulatory Manager, US Ink, 651 Garden St., Carlstadt, New Jersey 07072; consulted on all questions.

Paul Nicastro, Regulatory Coordinator, US Ink, 651 Garden St., Carlstadt, New Jersey 07072; consulted on questions 2-7 and 9.

Nick Kaminskyj, Group Leader, Analytical, US Ink, 651 Garden St., Carlstadt, New Jersey 07072; consulted on question 11.

William Griffin, Plant Manager, US Ink, 390 Central Ave., East Rutherford, New Jersey 07073; consulted on question 6.

Edwin Caddell, Sr., Eastern Manufacturing Manager, US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073; consulted on questions 2-7, 9 and 18.

Robert W. Schmidt, Vice President, Strategic Planning, US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073; consulted on questions 7 and 18.

David Harder, Lab Manager, US Ink, 343 Murray Hill Parkway, East Rutherford, New Jersey 07073; consulted on question 11.

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Larry Lepore, Vice President Operations, US Ink, 651 Garden St., Carlstadt, New Jersey 07072; consulted on question 18.

Peter Ford, Technical Director, US Ink, 651 Garden St., Carlstadt, New Jersey 07072; consulted on question 7.

22. For each question herein, identify all documents consulted, examined, or referred to in the preparation of the answer or that contain information responsive to the question and provide true and accurate copies of all such documents.

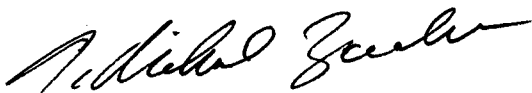
US Ink compiled its response to this 104(e) request by reviewing numerous documents, including ISRA/ECRA submittals, waste manifests and hazardous waste generator reports, when available. The documents reviewed are too voluminous to produce herein. US Ink produces certain summary pages of the ISRA/ECRA submittals. Documents produced herein are:

- *ECRA General Information Submission, dated October 20, 1986 (Exhibit B);*
- *ECRA Site Evaluation Submission, dated January 6, 1987 (Exhibit C);*
- *ECRA Final Report of Soil Cleanup, dated August 1993 (Exhibit D); and*
- *ISRA Final Groundwater Cleanup Report, dated January 1994 (Exhibit E).*

Other documents may be obtained upon request.

Very truly yours,

SUN CHEMICAL CORPORATION



F. Michael Zachara
Sr. Corporate Attorney

FMZ/wmz

cc: Clay Monroe, Esq. (w/enc.)

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bcc: Mr. Thomas Donvito (w/enc.)
Ellen Radow Sadat, Esq. (w/enc.)
Ingrid D. Johnson, Esq. (w/enc.)

Request for Information Regarding Chemical Releases to the Berry's Creek Study Area

* * *

Instructions: As instructed in Question 17, please complete this form by marking the appropriate spaces. Indicate whether each of the chemicals listed has ever been released from the Site to the Berry's Creek Study Area, including creeks, ditches, or other water bodies, or wetlands. Follow additional instructions below. Return the completed form along with your other responses to the Request for Information in the Matter of the Berry's Creek Study Area, Bergen County, New Jersey. N/A signifies no information available.

	Yes	No	N/A
Acenaphthene		X	
Acenaphthylene		X	
Anthracene		X	
Aluminum		X	
Antimony		X	
Arsenic		X	
benz(a)anthracene		X	
Benzene		X	
benzo(a)pyrene		X	
benzo(b)fluoranthene		X	
benzo(g,h,i)perylene		X	
benzo(k)fluoranthene		X	
bis(2-ethylhexyl)phthalate		X	
butyl benzyl phthalate		X	
Cadmium		X	
chlorinated dibenzo-p-dioxins (if "yes", please list specific dioxin compounds on a separate sheet)		X	
chlorinated dibenzofurans (if "yes", please list specific compounds on a separate sheet)		X	
Chlorobenzene		X	
Chloroform		X	
Chromium		X	
Chrysene		X	
Copper		X	
Cyanide		X	
dibenz(a,h)anthracene		X	
Dichlorobenzene		X	
1,2-dichloroethene		X	
di-n-butyl phthalate		X	
1,2-dichlorobenzene		X	
di-n-butyl phthalate		X	
1,2-dichlorobenzene		X	
1,2-dichloroethane		X	
Dieldrin		X	
di-n-octyl phthalate		X	
Dieldrin		X	
di-n-octyl phthalate		X	
Ethylbenzene		X	
Fluoranthene		X	

	Yes	No	N/A
Fluorene		X	
Hexachlorobenzene		X	
indeno(1,2,3-cd)pyrene		X	
Lead		X	
Manganese		X	
Mercury		X	
methylene chloride		X	
methyl ethyl ketone		X	
methyl mercury		X	
2-methylnaphthalene		X	
Naphthalene		X	
Nickel		X	
Pentachlorophenol		X	
petroleum hydrocarbons		X	
Phenanthrene		X	
Phenol		X	
Polychlorinated biphenyls (if "yes" please list specific congeners and aroclors on a separate sheet)		X	
polycyclic aromatic hydrocarbons (if "yes", please list specific compounds on a separate sheet; if not, listed on this page)		X	
Pyrene		X	
Selenium		X	
Silver		X	
1,1,2,2-tetrachloroethane		X	
Tetrachloroethylene		X	
Thallium		X	
Toluene		X	
1,2-trans dichloroethylene		X	
Tetrachloroethylene		X	
Thallium		X	
Toluene		X	
1,2-trans dichloroethylene		X	
1,1,1-trichloroethane		X	
Trichloroethylene		X	
vinyl chloride		X	
Xylene		X	
Zinc		X	

Thomas Donvito
Person completing form

US Ink, A Division of Sun Chemical
Company

390 Central Ave., E. Rutherford, NJ
Site

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
BUREAU OF INDUSTRIAL SITE EVALUATIONENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA)
INITIAL NOTICEGENERAL INFORMATION SUBMISSION (GIS)

This is the first part of a two-part application form. This information must be submitted within 5 days following public release of a decision to close operations or the signing of a sales agreement or option to purchase involving an Industrial Establishment as defined in N.J.S.A. 13:1K-6, the Environmental Cleanup Responsibility Act.

SUBMIT THE ORIGINAL PLUS TWO COPIES OF THIS COMPLETED FORM AND ANY ATTACHMENTS.

Please refer to instructions and N.J.A.C. 7:1-3.7(d) before filling out this form. Answer all questions. Please print or type.

Date: OCTOBER 20, 1986

1. A. Industrial Establishment:

Name: UNITED STATES PRINTING INK CORP. Telephone No.: (201) 933-7100

Street Address: 343 MURRAY HILL PARKWAY

City or Town: E. RUTHERFORD State: N.J. Zip Code: 07073

Municipality: _____ County: BERGEN

B. Tax Lot Number: 4C Tax Block Number: 106A MADISON CIRCLE HM

C. Standard Industrial Classification (SIC) Number: 2893

D. Current Owner (Property):

Name: MILLMASTER ONYX GROUP, INC. Telephone No.: (212) 687-2757

Firm: _____

Street Address: 99 PARK AVENUE

Municipality: NEW YORK State: N.Y. Zip Code: 10016

E. Current Operator of Industrial Establishment:

Name: SAME AS 1A Telephone No.: _____

Firm: _____

Street Address: _____

Municipality: _____ State: _____ Zip Code: _____

F. Current Owner (Business, if different from operator):

Name: _____ Telephone No.: _____

Firm: _____

Street Address: _____

Municipality: _____ State: _____ Zip Code: _____

FOR DEP USE ONLY

Date Rec'd. _____ Notice No. _____

- G. If the Industrial Establishment discharges sanitary and/or industrial wastes to a publicly-owned treatment plant, provide the name and address of that facility.

Name: BERGEN COUNTY UTILITIES AUTH. Telephone No.: (201) 641-2552

Street Address: BOX 122 FOOT OF MEHRHOF ROAD

Municipality: LITTLE FERRY State: N.J. Zip Code: 07643

Is a septic system used (or used previously) at the site? ☐ Yes ☒ No

- H. Has an ECRA application been filed for this Industrial Establishment or location subsequent to January 1, 1984? ☐ Yes ☒ No If so, when? _____

For what reason _____

Final disposition _____

- I. How is this Industrial Establishment heated? (gas, oil, electricity) GAS

2. List previous activities at the location(s) involved (attach additional sheets if necessary). In addition to describing the activities, list the business name(s), current address(es) and dates of ownership/operation of the previous activity(ies), if known.

SEE APPENDIX A

3. If the transaction initiating an ECRA review is the cessation of operations at this location, fill in the date of public release of the decision to close the facility and enclose a copy of the public announcement. Is a cessation of operations involved? ☐ Yes ☒ No

Date of the public release of the decision _____

Is the public release enclosed? ☐ Yes ☐ No

If you checked "no", state the reason(s) _____

4. If the transaction initiating an ECRA review is an agreement of sale or option to purchase, fill in the date of the execution of that instrument plus provide a copy of the document _____

A. Is a sale involved? ☒ Yes ☐ No

B. Date of Agreement _____

C. Is a copy of the agreement of sale or option to purchase attached? ☒ Yes ☐ No

If you checked "no", state the reason(s) _____

- D. Clearly describe the transaction in terms of the action which initiates the ECRA review (e.g., sale of real estate only, sale of real estate and business, cessation of operations only, etc.):

STOCK TRANSFER OF PARENT CORPORATION

- E. List other parties (purchasers) to the transaction:

NAME	STREET ADDRESS AND MUNICIPALITY	PHONE NO.
NEWCO - A WHOLLY OWNED SUBSIDIARY OF REGIONAL FINANCIAL ENTERPRISES 3LP	36 GROVE STREET NEW CANNAN, CT. 06840	203-966-2800

5. Actual date proposed for closure of operations or transfer of title: PRIOR TO 12/31/86

6. Authorized agent designated to work with the Department:

Name: GARY F. DANIS Telephone No.: (201) 434-1700

Firm: MILLMASTER ONYX GROUP, INC.

Street Address: 190 WARREN STREET

Municipality: JERSEY CITY State: N.J. Zip Code: 07302

7. List all federal and state environmental permits applied for and received at this facility (attach additional sheets if necessary).

Check here if no permits are involved: _____

A. New Jersey Bureau of Air Pollution Control

PERMIT NO.	CERTIFICATE NO.	DATE OF APPROVAL OR DENIAL	REASON FOR DENIAL (if applicable)	EXPIRATION DATE
043644		8/3/79		8/1/89
043645		8/3/79		8/1/89
043646		8/3/79		8/1/89

B. New Jersey Pollutant Discharge Elimination System

NUMBER	DISCHARGE ACTIVITY	DATE ISSUED OR DENIED	EXPIRATION DATE	BODY OF WATER DISCHARGED INTO
NJ 0003646	NON-CONTACT COOLING WATER	8/1/79	-	BERRY'S CREEK

C. United States Environmental Protection Agency (EPA) Identification Number and copy of the most recent generator Annual Report prepared pursuant to the New Jersey Hazardous Waste Regulations.

ID # NJD 095171948

Is a copy of the Annual Report attached? ☒ Yes ☐ No

APPENDIX B

D. All other federal, state, local governmental permits.

AGENCY ISSUING PERMIT	PERMIT NUMBER	DATE OF APPROVAL OR DENIAL	EXPIRATION DATE
NJ - BUREAU OF FIRE SAFETY	0212-46112 001-01	6/16/86	

8. If applicable, identify all administrative orders, temporary or permanent injunctions, civil administrative penalties, or criminal actions concerning the environment issued against the facility, its owners, or managers during the last ten years.

Check here if no enforcement actions are involved _____
APRIL 27, 1981

A. Date of Action _____

Section of Law or Statute violated 7:26-2.2(b) & 2.2(c)

Type of Enforcement Action NOTICE OF PROSECUTION

Description of the Violation _____

ALLEGED VIOLATIONS CONCERNING THE MANAGEMENT AND DISPOSAL OF SOLID WASTE.

How was the violation resolved? FINE WAS COMPROMISED TO \$500 (PAID). ALLEGED VIOLATION UNDER 7:26-2.2(c) WAS WITHDRAWN. OFFENDING DRUMS WERE REMOVED AND THE SITE CLEANED UP TO NJDEP SATISFACTION.

B. Date of Action _____

Section of Law or Statute violated _____


Type of Enforcement Action _____

Description of the Violation _____

How was the violation resolved? _____

(Add additional pages, if necessary)

I hereby certify that the information furnished on this application and any attachments is true. I am aware that false swearing is a crime in this State. I am cognizant that providing false information is a violation under ECRA and that I may be personally liable for penalties up to \$25,000 per day.

Signature
GARY F. DANIS

Name (Print or Type)

DIRECTOR, ENGINEERING & ENVIRONMENTAL AFFAIRS

Title

OCTOBER 20, 1986

Date

FORM ECRA-1
GENERAL INFORMATION SUBMISSION (GIS)
APPENDIX A

United States Printing Ink (USPI) has been the only operator of a facility at this location. USPI acquired the property (unimproved lot) from D. Seixas, N. Seixas, I. Brooks, B. Brooks on November 10, 1965.

Manufacturing building and offices were erected in 1967 for the production of Web-Off-Set and Letter Press Inks.

In 1968 USPI was purchased by Millmaster Onyx Corporation. Operations at the site remained unchanged.

In 1976 Millmaster Onyx Corporation was purchased by Kewanee Industries, Inc. Operations at the site remained unchanged.

In 1977 Kewanee Industries, Inc. was purchased by Gulf Oil Corp., Houston, Texas. Operations at the site remained unchanged.

On December 22, 1982 Millmaster Onyx Group, Inc. (the current owner) acquired USPI from Gulf Oil Corp. Operations at the site remained unchanged.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: U.S. PRINTING INK CORP. EPA ID No.: NJD095171948
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: APTEC, INC. EPA ID No.: NJD099287484
3. TSD Facility Name: Chem-Met Services EPA ID No.: MID096963194
TSD Address: 18550 Allen Road, Wyandotte, MI 48192

Waste A.) <u>Number</u>	Waste B.) <u>Description</u>	DOT Haz C.) <u>Class</u>	Total D.) <u>Quantity</u>	E.) <u>Units</u>
K086	Hazardous Waste Solids, ORM-E	NA9189	800	P

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: United States Printing Ink Corp. EPA ID No.: NJD095171948
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: S-J Transportation EPA ID No.: NJD071629976
3. TSD Facility Name: Rollins Environmental Service, Inc. EPA ID No.: NJD053286239
TSD Address: Route 322, Bridgeport, NJ 08014

A.) <u>Number</u>	B.) <u>Waste Description</u>	C.) <u>DOT Haz Class</u>	D.) <u>Total Quantity</u>	E.) <u>Units</u>
D005, D007, D008	Hazardous Waste Liquid, H.O.S. Combustible	NA9189	4,950	G

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

APPENDIX B

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- WASTE SUMMARY FORM -

Generator Name: United States Printing Ink Corporation

EPA ID No.: NJD095171948

Please indicate below the total quantity of hazardous waste manifested during the 1985 report year for each unit of measure:

4950 G - Gallons (liquids only)
800 P - Pounds
 T - Tons (2,000 lbs.)
 Y - Cubic Yards
 L - Liters (liquids only)
 K - Kilograms
 M - Metric Tons (1,000 kg)
 N - Cubic Meters

*Enter zero (0) for units of measure which were not utilized.

APPENDIX B

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE MINIMIZATION SURVEY

HAZARDOUS WASTE GENERATOR WASTE REDUCTION PROGRAM, FY 1985

- Please complete both sides -

Company: United States Printing Ink Corporation 11JD095171948
(Name) (EPA ID Number)

Mailing Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
(Street) (City) (Zip Code)

Location of Generator Site: SAHE
(if different from mailing address)

Contact Person: Robert W. Schmidt 201-933-7100
(Name) (Telephone Number)

Robert W. Schmidt VP & Regional Manager
(Signature) (Title)

Please provide information about your company's hazardous waste minimization program. (If more space is needed, please answer on a separate sheet of paper and attach it to the questionnaire.)

1. Separation

Is your company's waste collection system designed to decrease the volume of hazardous waste by keeping hazardous waste separate from non-hazardous waste?

Yes No

If yes, has the system been improved in the past year to further reduce the amount of hazardous waste?

Yes No

What reduction in volume was achieved in the last year? 15%

2. Substitution

Has your company substituted a hazardous material with a non-hazardous or less hazardous material to reduce either the amount or toxicity of hazardous waste generated by your operation?

Yes No

If yes, when was the substitute introduced, and to what extent has it reduced the toxicity or amount of hazardous waste generated in the last year?

Beginning of December - will eventually eliminate our D003 waste generation.

APPENDIX B

3. Efficiency

Has your company improved the efficiency of operations so as to reduce the amount of hazardous waste generated?

☒ Yes

☐ No

If yes, please describe it briefly and state when it was instituted.

Improved management.

What amount of waste reduction was achieved in the last year? 15%

4. Recycling on-site

Does your company's waste reduction program include a hazardous waste recycling operation on-site?

☐ Yes

☒ No

If yes, please briefly describe the recycling operation and state when it was instituted.

What amount of waste reduction was achieved in the last year?

5. Treatment on-site

Does your company's hazardous waste reduction program include on-site waste treatment which minimizes the toxicity or amount of hazardous waste generated?

☐ Yes

☒ No

If yes, please briefly describe the treatment operation and state when it was instituted.

To what extent has the treatment operation reduced toxicity or reduced the amount of hazardous waste generated in the past year?

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE MINIMIZATION SURVEYHAZARDOUS WASTE GENERATOR WASTE REDUCTION PROGRAM, FY 1985

- Please complete both sides -

Company: United States Printing Int. Corporation 11-0005171048
(Name) (EPA ID Number)

Mailing Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
(Street) (City) (Zip Code)

Location of Generator Site: SAH
(If different from mailing address)

Contact Person: Robert W. Schmidt 201-933-7100
(Name) (Telephone Number)

Robert W. Schmidt VP & Regional Manager
(Signature) (Title)

Please provide information about your company's hazardous waste minimization program. (If more space is needed, please answer on a separate sheet of paper and attach it to the questionnaire.)

1. Separation

Is your company's waste collection system designed to decrease the volume of hazardous waste by keeping hazardous waste separate from non-hazardous waste?

(Yes) No

If yes, has the system been improved in the past year to further reduce the amount of hazardous waste?

(Yes) No

What reduction in volume was achieved in the last year? 15%

2. Substitution

Has your company substituted a hazardous material with a non-hazardous or less hazardous material to reduce either the amount or toxicity of hazardous waste generated by your operation?

(Yes) No

If yes, when was the substitute introduced, and to what extent has it reduced the toxicity or amount of hazardous waste generated in the last year?

Beginning of December - will eventually eliminate our D003 waste generation.

APPENDIX B

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☐ No

If yes, please describe it briefly and state when it was instituted.

Improved management.

What amount of waste reduction was achieved in the last year? 15%

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Does your company's waste reduction program include a hazardous waste recycling operation on-site?

☐ Yes

☒ No

If yes, please briefly describe the recycling operation and state when it was instituted.

What amount of waste reduction was achieved in the last year?

5. Treatment on-site

Does your company's hazardous waste reduction program include on-site waste treatment which minimizes the toxicity or amount of hazardous waste generated?

☐ Yes

☒ No

If yes, please briefly describe the treatment operation and state when it was instituted.

To what extent has the treatment operation reduced toxicity or reduced the amount of hazardous waste generated in the past year?

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- WASTE SUMMARY FORM -

Generator Name: United States Printing Ink Corporation

EPA ID No.: HJ0095171848

Please indicate below the total quantity of hazardous waste manifested during the 1985 report year for each unit of measure:

4950 G - Gallons (liquids only)
500 P - Pounds
 T - Tons (2,000 lbs.)
 Y - Cubic Yards
 L - Liters (liquids only)
 K - Kilograms
 M - Metric Tons (1,000 kg)
 N - Cubic Meters

*Enter zero (0) for units of measure which were not utilized.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: U.S. PRINTING INK CORP. EPA ID No.: NJ0095171943
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: APTEC, INC. EPA ID No.: NJD099287484
3. TSD Facility Name: Chem-Met Services EPA ID No.: MI0096963194
TSD Address: 18550 Allen Road, Wyandotte, MI 48192

Waste A.) Number	Waste B.) Description	DOT Haz C.) Class	Total D.) Quantity	E.) Units
K026	Hazardous Waste Solids, ORH-E	HA9139	800	P

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: United States Printing Ink Corp. EPA ID No.: NJD095171948
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: S-J Transportation EPA ID No.: NJD071629976
3. TSD Facility Name: Rollins Environmental Service, Inc. EPA ID No.: NJD083286239
TSD Address: Route 372, Bridgeport, NJ 08014

A.) Number	B.) Description	DOI Haz C.) Class	Total D.) Quantity	E.) Units
D005, D007, D008	Hazardous Waste Liquid, H.O.S. Combustible	HA9189	4,950	G

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
BUREAU OF INDUSTRIAL SITE EVALUATION

ENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA)

APPLICATION FOR ECRA REVIEW
INITIAL NOTICE

SITE EVALUATION SUBMISSION (SES)

This is the second part of a two-part application submittal and must be submitted within 30 days following public release of the decision to close operations or execution of an agreement of sale or option to purchase.

DATE January 6, 1987

NAME OF INDUSTRIAL ESTABLISHMENT United States Printing Ink Corporation

ADDRESS 343 Murray Hill Parkway

CITY OR TOWN E. Rutherford, N.J. ZIP CODE 07073

MUNICIPALITY _____ COUNTY Bergen

NAME OF PROPERTY OWNER _____

FIRM: Millmaster Onyx Group, Inc.

ADDRESS: 99 Park Avenue

CITY OR TOWN: New York, New York ZIP CODE: 10016

MUNICIPALITY _____ COUNTY _____

SUBMIT THE ORIGINAL PLUS TWO COPIES OF THE FOLLOWING:

(NOTE: ITEM FOURTEEN (14) REQUIRES THREE COPIES)

9. A scaled site map identifying all areas where hazardous substances or wastes have been or currently are generated, manufactured, refined, transported, treated, stored, handled or disposed, above or below ground.

IS THIS MAP ENCLOSED? ☒ YES (See Appendix # _____) ☐ NO See Drawing #SP-1

10. A detailed description of the most recent operations and processes at the industrial establishment organized in the form of a narrative report designed to guide the Department step-by-step through a plant evaluation, with particular emphasis on areas of the process stream where hazardous substances and wastes are generated, manufactured, refined, transported, treated, stored, handled or disposed on site, above or below ground. Also identify any floor drains with their points of discharge, septic systems if applicable, seepage pits and dry wells. Please note that establishments which ceased production prior to December 31, 1983, but are subject to ECRA because of on-going storage beyond that date, must provide details on past operations.

IS THIS REPORT ENCLOSED? ☒ YES (See Appendix # A) ☐ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): _____

FOR DEP. USE ONLY

Notice No. _____

11. A. A description of the types, age (installation date), construction material, capacity, contents, and locations of storage vessels, surface impoundments, landfills, or other types of storage facilities, including drum storage, containing hazardous substances or wastes.

ARE THESE FACILITIES IDENTIFIED ON YOUR SITE MAP OR DESCRIBED IN A NARRATIVE REPORT?

☒ YES (See Appendix # B) ☐ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): _____

- B. The integrity of all underground tanks which contain hazardous wastes or substances must be verified. This may be accomplished in one of several ways: a) Performance of a satisfactory leak test in conformance with Criterion 329 of the National Fire Protection Association, or; b) Performance of subsurface soil investigation (soil borings and analysis), or; c) Excavate and remove the tank and establish the absence of contamination, or; d) other methods approved by the NJDEP.

ARE THE RESULTS OF THE LEAK DETECTION TEST OR THE SUBSURFACE INVESTIGATION ENCLOSED?
☐ YES ☒ NO

☐ YES (See Appendix # _____) ☒ NO

IF YOU HAVE CHECK "NO", STATE THE REASON(S): No underground tank on this
site.

site.

12. A complete inventory of hazardous substances and wastes, including description and locations of all hazardous substances or wastes generated, manufactured, refined, transported, treated, stored, handled or disposed on site, above and below ground, and a description of the location, types and quantities of hazardous substances and wastes that will remain on site. (Attach additional sheets if necessary.) Review N.J.A.C. 7:1E, Appendix A and N.J.A.C. 7:26-8 prior to completing to ensure that all defined hazardous materials are included.

[illegible]

13. A. A detailed description, date and location on a scaled map of any known spill or discharge of hazardous substances or wastes that occurred during the historical operation of the site and a detailed description of any remedial actions undertaken to handle any spill or discharge of hazardous substances or wastes. (Attach additional sheets if necessary.)

IS THIS INFORMATION ENCLOSED? ☒ YES (See Appendix # _____) ☐ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): Plant reports only minor spills within manufacturing areas and the rear yard. Minor spills are readily observed by manufacturing personnel and cleaned up. No reportable spills are known to have occurred on site.

ARE THE SPILLS IDENTIFIED ABOVE INDICATED ON THE SCALED SITE MAP? ☐ YES ☒ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): N/A

13. B. If this facility has an approved Spill Prevention Control and Countermeasure Plan (SPCC), enclose a copy with this submittal.

IS YOUR SPCC PLAN ENCLOSED? ☒ YES (See Appendix # E)
☐ NO, this facility is not required to have an SPCC plan

14. A. A detailed sampling or other environmental evaluation measurement plan which includes proposed soil, groundwater, surface water, surface water sediment, and air sampling determined appropriate for the site. (This sampling plan must be developed in conformance with ECRA Regulations N.J.A.C. 7:1-3.14 et seq., and Quality Assurance Guidelines as developed by DEP)

ARE THREE COPIES OF THE SAMPLING PLAN ENCLOSED? ☒ YES (See Appendix # G)
☐ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): _____

14. B. If the sampling plan includes groundwater sampling and/or the installation of monitoring wells, the applicant must complete a "Request for Hydrogeologic Assessment" form (blank form attached).

IS GROUNDWATER SAMPLING PROPOSED? ☐ YES ☒ NO

IS THE "REQUEST FOR HYDROGEOLOGIC ASSESSMENT" FORM ATTACHED? ☐ YES (See Appendix # _____)
☒ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): N/A

15. A detailed description of the procedures to be used to decontaminate and/or decommission equipment and buildings involved with the generation, manufacture, refining, transportation, treatment, storage, handling, or disposal of hazardous wastes or substances including the name and location of the transporter, the ultimate disposal facility, and any other organizations involved.

IS THE DETAILED DESCRIPTION ENCLOSED? ☐ YES (See Appendix #) ☒ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): N/A Operations will continue on site in their current form.

16. Copies of all previous soil, groundwater and surface water sampling results, including effluent quality monitoring, conducted at the site of the industrial establishment during the history of ownership/operation by the owner or operator. Also include a detailed description of the location, collection, chain of custody, methodology, analyses, laboratory, quality assurance/quality control procedures, and other factors involved in preparation of the sampling results. No prior sampling

ARE HISTORICAL RESULTS ENCLOSED? ☐ YES (See Appendix #) ☒ NO

IF YOU HAVE CHECKED "NO", STATE THE REASON(S): N/A None conducted

17. List any other information you are submitting or which has been formally requested by this agency:

See Appendix #F

Woodward-Clyde and Associates site preparation reports dated

10/18/63 and 11/15/68

I hereby certify that the information furnished on this application and any attachments is true. I am aware that false swearing is a crime in this State. I am cognizant that providing false information is a violation under ECRA and that I may be personally liable for penalties up to \$25,000 per day.

1/6/87
Date

Gary E. Danis
Signature

Gary E. Danis
Name (Print or Type)

Dir. Engineering & Environmental Affairs
Title

APPENDIX "A"

10. DESCRIPTION OF MANUFACTURING PROCESSES AND OPERATIONS

USPI Corp. is a manufacturer of paste printing inks used primarily in the newspaper industry. These inks are formulated with treated petroleum distillates as their solvent medium. These ink oils have a very high flash point and boiling range, low vapor pressure and are considered a safe material based on OSHA's Hazard Communication Standard 29 CFR 1910.1200.

Manufacture of color printing inks involves the blending of flush pigment or dry pigment into a mixing vat with hydrocarbon resins, mineral oil, and microcrystalline waxes. The pigment is dispersed in the mineral oil to a uniform mixture by going through a three roll mill. This varies depending upon the type of ink, or pigment involved. In some cases the ink may only have to be filtered and pumped through a micro bag to remove large undispersed particles. Inks are then packaged according to the customer's order (either in containers or tote bins). Finished ink is then labeled with formulation number and proper caution labels are applied. From this point they are placed in storage until they are pulled to fill an order. Wastes generated are normally able to be recycled to the process.

Black ink manufacturing is performed in the Blackroom, which is isolated from the color ink manufacturing. To a precharged mixing vat of mineral oil a certain amount of carbon black is charged from the silo. The batch is then further processed by the addition of mineral oil and other ingredients. After the batch is mixed and blended, the material is transferred to holding tanks until time for milling. The black ink is milled through a Drais mill and then transferred to a finish ink tank awaiting final disposition. This ink may be drummed off or pumped to a tank truck for delivery to the customers. Generation of waste is from the filters used in the filtration of black ink. This waste stream has been classified by the NJDEP as non-hazardous and is disposed of by incineration or as a supplementary fuel for Cement Kiln operations. The waste has a very high BTU value of anywhere between 15,000 - 18,000 BTU per pound.

The hazardous waste storage area is located on the West side of the manufacturing building. The unit is diked, paved and fenced-in with the necessary warning signs. There are no RCRA hazardous wastes on site at this time. Hazardous wastes generated during operations at the facility include: waste inks (K086), waste mineral oils and inks containing barium, chromium and lead (D005, D007, D008).

Any hazardous substance which might be in stock are stored in their original shipping containers. These containers may vary from a 55 gal. steel drum to 50 lb. paper bags. Large volume of mineral oils are received in tank truck loads and transferred to holding tanks.

Raw materials used prior to 1982 in the manufacturing of the printing inks included: mineral oils, aromatic naphthinic mineral oils, michlers ketone and shellac. Current (1986) raw materials used in manufacture of the inks are covered in the response to ECRA SES Question 12.

APPENDIX "B"

11A. STORAGE OF HAZARDOUS SUBSTANCES AND WASTES

<u>CHEMICAL SUBSTANCE</u>	<u>TANK NO.</u>	<u>TANK CAPACITY (IN GALLONS)</u>	<u>AGE (YEARS)</u>	<u>MATERIAL CONSTRUCTION</u>	<u>LOCATION</u>
MSO	113	3,800	20	C. Steel	Black Room
MSO	114	3,650	20	" "	Black Room
750 Oil	105	12,500	20	" "	Manufacturing
750 Oil	106	7,000	20	" "	Manufacturing
750 Oil	108	7,000	20	" "	Manufacturing
750 Oil	110	7,000	20	" "	Manufacturing
47 Oil	111	1,200	20	" "	South Yard
Picco 7140	118	10,000	20	" "	South Yard
Picco 7140	124	2,500	20	" "	Black Room
Zeco AA 1957	206A	4,000	20	" "	Black Room
Zeco AA 1957	206B	4,000	20	" "	Black Room
2400 Oil	107	3,900	20	" "	Manufacturing
2400 Oil	109	4,000	20	" "	Manufacturing
2400 Oil	116	5,500	20	" "	Black Room

NOTE:

1. MSDS's attached as Appendix "D".
2. Site does not use any tanks for the storage of hazardous wastes.
3. See Appendix "C" for inventory of ECRA hazardous substances and wastes.

APPENDIX "C"

12. INVENTORY OF HAZARDOUS SUBSTANCES AND WASTES

<u>CHEMICAL SUBSTANCE</u>	<u>QUANTITY</u>	<u>LOCATION</u>	<u>STORAGE METHOD</u>	<u>TO REMAIN ON-SITE</u>
Molybdate Orange	1,000 Lbs.	M-Section	25-Lb. Bags	Yes
Naphtholite	110 Gals.	55-Gal. in Yard 55-Gal. in Storage Cabinet	55-Gal. Steel Drs.	Yes
Phosphoric Acid	100 Lbs.	Unisol Area	Plastic Drs.	Yes
Trisodium Phosphate	200 Lbs.	Unisol Area	100 Lb. Bags	Yes
Caustic Soda, Anhydrous	200 Lbs.	Unisol Area	100 Lb. Drs.	Yes
Unisol DX	100 Gals.	Unisol Area	Plastic Drs.	Yes
Alkemex 90	250 Gals.	Unisol Area	Plastic Drs.	Yes
Phthalo Green Flush (Copper Compound)	1,000 Lbs.	Warehouse	Steel Drs., 15-Gal. Pails	Yes
Phthalo Blue Flush (Copper Compound)	5,000 Lbs.	Warehouse	Steel Drs., 15-Gal. Pails	Yes
52 Oil	440 Gals.	M-Section	55-Gal. Steel Drs.	Yes
MSO	4,850 Gals.	Black Room	Bulk Tank	Yes
750 Oil	14,200 Gals.	Manufacturing	Bulk Tank	Yes
2400 Oil	8,400 Gals.	Manufacturing/ Black Room	Bulk Tank	Yes
47 Oil	600 Gals.	South Yard	Bulk Tank	Yes
Picco 7140	8,500 Gals.	Black Room	Bulk Tank	Yes
Zeco AA-1957	3,500 Gals.	Black Room	Bulk Tank	Yes

NOTE:

1. MSDA's attached as Appendix "D".
2. There are no hazardous wastes on-site at this time.

APPENDIX E

SPCC PLAN

UNITED STATES PRINTING INK CORPORATION

East Rutherford, NJ

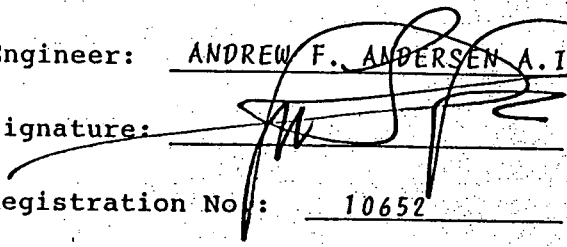
SEPTEMBER 1986

UNITED STATES PRINTING INK CORPORATION
EAST RUTHERFORD, N.J.

CERTIFICATION

I, hereby, certify that I have examined the facility
and being familiar with the provisions of 40 CFR 112
attest that this SPCC Plan has been prepared in
accordance with good engineering practice.

Engineer: ANDREW F. ANDERSEN A.I.A. P.E.

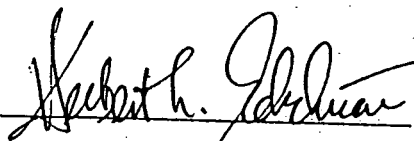
Signature: 

Date: DEC. 30, 1986

Registration No.: 10652

State: NEW JERSEY

This SPCC Plan has the approval of
UNITED STATES PRINTING INK CORPORATION
management, and will be implemented as
herein described.

Signature: 
Name: Herbert L. Edelman
Title: Vice President- Operations
Date: Dec 31, 1986

FACILITY DESCRIPTION

UNITED STATES PRINTING INK CORPORATION'S plant in East Rutherford is a wholly owned subsidiary of Millmaster Onyx Group, Inc. National headquarters for UNITED STATES PRINTING INK CORPORATION is located at the East Rutherford site. This plant manufactures offset and letterpress printing inks, primarily for the newspaper and publication printing industries.

Major raw materials are received in bulk by rail car and tank truck. They are processed with other ingredients at this facility and shipped out as a finished product. The vast majority of production is shipped in tank trucks, while tote tanks, drums, and other smaller containers are used for the balance.

The facility consists of:

- I. A rail siding with appropriate equipment for unloading rail shipments of carbon black and tank trucks of oil.
- II. An enclosed garage used to load tank trucks with finished product.

- III. The general plant which includes a warehouse for raw materials and finished goods, shipping and receiving, a mill room, a "black" manufacturing area, a mixing room, maintenance, laboratories and office space.
- IV. A portion of the yard area is used for drum storage, when required.
- V. A total of 54 tanks are utilized for storage of raw materials and finished goods. Of these, two are located outside of the building, adjacent to the rail siding. One tank is located in the rear yard, and one tank (silo) is on the roof of the manufacturing building. The capacities of the tanks range from 250 to 12,500 gallons.
- VI. A total of 37 tanks located inside the plant are used in processing the finished product. These tanks vary in size from 250 to 1,300 gallons.
- VII. A bulk storage and conveying system capable of handling 118,000 lbs. of carbon black is located over the black room.

(See Appendix A for plant layout.)

PAST SPILL EXPERIENCE

None of the presently employed personnel
can recall having a spill which permitted
oil to enter waters of the United States.

POTENTIAL SPILL SOURCES

The following areas have been identified as the most probable sources of a spill occurrence. They are listed below in order of decreasing potential for severity.

I. RAIL CAR AND TANK TRUCK UNLOADING

Due to the volume of materials handled and the proximity to the railroad ditch, this area represents the most serious opportunity for a significant spill.

Based upon existing grade, a major spill event would flow in a north-northwesterly direction parallel to the rail siding. Due to the relatively high viscosity of most of the oils used (750 - 2400 SSU @ 100°F.), rate of flow would be extremely slow.

With regard to normal runoff, the rail ditch contains three screens equipped with an absorbent suitable for hydrocarbons.

II. RAW MATERIAL STORAGE TANKS Nos. 111 & 118

These vessels are located outside the south wall of the building adjacent to the rail siding. The location of these tanks with relation to the railroad ditch represents the major reason for concern.

Tank No. 118 has a capacity of 10,000 gallons. However, the viscosity of its contents is so high that it must constantly be heated to permit pumping. The rate

of flow of any spill would, therefore, be extremely slow. Tank No. 111 has a capacity for 1,200 gallons of a low viscosity oil.

The spill potential from either tank is greatly minimized by the fact that the fill connections are hard piped into the building. Both of the raw material storage tanks are contained in a diked area.

III. STORAGE AND BLENDING TANKS IN THE "BLACK" MANUFACTURING AREA

The potential for a spill from these tanks is substantially mediated by the viscous nature of most of the contents. Two tanks, Nos. 113 and 114, contain a low viscosity oil which would flow rapidly under ambient conditions. For this reason, the floor has been pitched to direct any spill towards the interior wall of this room.

IV. BULK TANK TRUCK LOADING

As with any bulk loading operation, there is a potential for a spill in this area. However, considering the viscous nature of the products handled, the enclosed nature of the operation, and the fact that loading arms are all equipped with self-closing valves, the probability of a serious spill is extremely low. Absorbant materials are on site for the containment and cleanup of

minor spills. Major spills would be contained by the natural grading of the enclosed garage area.

V. INSIDE STORAGE AND BLENDING TANKS (excluding Black manufacturing)

In this area, all storage tanks above 3,300 gallon capacity are enclosed by a dike sufficient to contain the volume of the largest vessel. All low viscosity oils are in this area.

The remaining tanks contain relatively viscous fluids, i.e., greater than 750 SSU @ 100°F. In addition, the plant floor contains no drains and is pitched towards the middle of the mill room. As a final precaution, all of the storage tanks are equipped with readily visible gauging mechanisms to prevent overfilling.

These factors combine to minimize and contain any spill which might occur. As an additional precautionary measure, an emergency shut-off valve is described in a later section, "Spill Prevention (Proposed Improvements)".

VI. OUTSIDE DRUM STORAGE

A minimum number of drums of raw materials are kept in the backyard. A totally secure area is maintained for the small quantity of hazardous waste generated.

Every attempt is made to store the remaining materials on the paved portion of the yard. This area is inspected

daily by plant personnel, and any leaking containers are repackaged and spills immediately removed.

The viscous nature of most of the materials stored in these containers also limits risk.

VII. STRAINING SYSTEM FOR ENERGY RECOVERY

One tank is located in the backyard adjacent to the dumpster. This tank is contained in a diked area. Since off-specification ink is dumped from drums into this tank, the opportunity for small spills exists. Any spill will be contained within the diked area. Standard operating procedure includes the following safeguards:

1. After all containers have been emptied, any spilled waste is to be removed with absorbent and packaged securely for safe disposal.
2. No transfer into or out of this system will be conducted unless the operation is constantly attended. If for any reason plant personnel are called away, the transfer operation must be halted.

SPILL PREVENTION - EXISTING

Many of the existing structural features or management practices designed to prevent and/or contain potential spills are included in the section entitled: "Potential Spill Sources". Additional items are provided in this section.

I. RAIL CAR AND TANK TRUCK UNLOADING

- A. All unused pipeline terminal connections are capped and labeled as to origin.
- B. Piping is adequately supported and all piping and valves are inspected on a regular basis.
- C. Premature movement of railcars which are still connected is prevented by either a prominent warning flag or a derailling device at the switch leading to our siding.

II. RAW MATERIAL STORAGE TANKS Nos. 111 & 118

- A. Runoff from this area flows into the rail ditch and is intercepted by three screens equipped with absorbent suitable for hydrocarbons. These materials are inspected and replenished on a regular basis.
- B. The materials of construction and design of both tanks are compatible with the oil-based nature of thier contents.

- C. These tanks are inspected regularly to assure no significant deterioration has taken place. Visible leaks in pipe or fitting are repaired immediately.

III. STORAGE AND BLENDING TANKS IN THE "BLACK " MANUFACTURING AREA

- A. The design and materials of construction of these tanks are in conformance with accepted practice for oil-based products.
- B. These tanks are inspected regularly to assure no significant deterioration has taken place. Visible leaks in pipe or fitting are repaired immediately.

IV. BULK TANK TRUCK LOADING

- A. Tank trucks all meet minimum DOT requirements for the types of products we manufacture.
- B. Lower outlets on all vehicles are inspected prior to loading.
- C. Piping and valves are inspected regularly and repaired promptly.
- D. Starter controls for pumps are secured inside the building when the plant is not operating.
- E. Adequate lighting is provided to assure early identification of a spill and prevent acts of vandalism.

V. INSIDE STORAGE AND BLENDING TANKS
(excluding Black Manufacturing)

- A. The design and materials of construction of these tanks are in conformance with accepted practice for oil-based products.
- B. These tanks are inspected regularly to assure no significant deterioration has taken place. Visible leaks in pipe or fitting are repaired immediately.

VI. STRAINING SYSTEM FOR ENERGY RECOVERY

- A. The design and materials of construction of these tanks are in conformance with accepted practice for oil-based products.
- B. Equipment is inspected regularly to assure no significant deterioration has taken place. Visible leaks in pipe or fitting are repaired immediately.
- C. Lower outlets on all vehicles are inspected prior to loading.
- D. Starter controls for pumps are locked when the plant is not operating or the system is shutdown.
- E. Adequate lighting is provided to assure early identification of a spill and prevent acts of vandalism.

In addition to the above items, management enforces and regularly reviews standard operating procedures designed to control the human factor. These include written inspection procedures and reports and the monitoring of all bulk storage areas by a security service during periods when the plant is not operating. An individual, Mr. Ed Caddell has been assigned overall responsibility to execute these procedures and recommend modifications where appropriate. Spill prevention briefings are conducted annually to review recent experience and assure that plant personnel are familiar with all components of the Spill Prevention Control and Countermeasure Plan (SPCC).

SPILL PREVENTION (PLANNED IMPROVEMENTS)

The previous section detailed existing conditions which serve to minimize the possibility of and/or contain spills. It is recognized that further improvements are required to provide for a more fail-safe system. The proposed improvements are explained in greater detail in this section.

I. OIL TANK TRUCK UNLOADING DOCK

To insure that no hydrocarbon contamination would occur through the storm system, an oil interceptor will be installed.

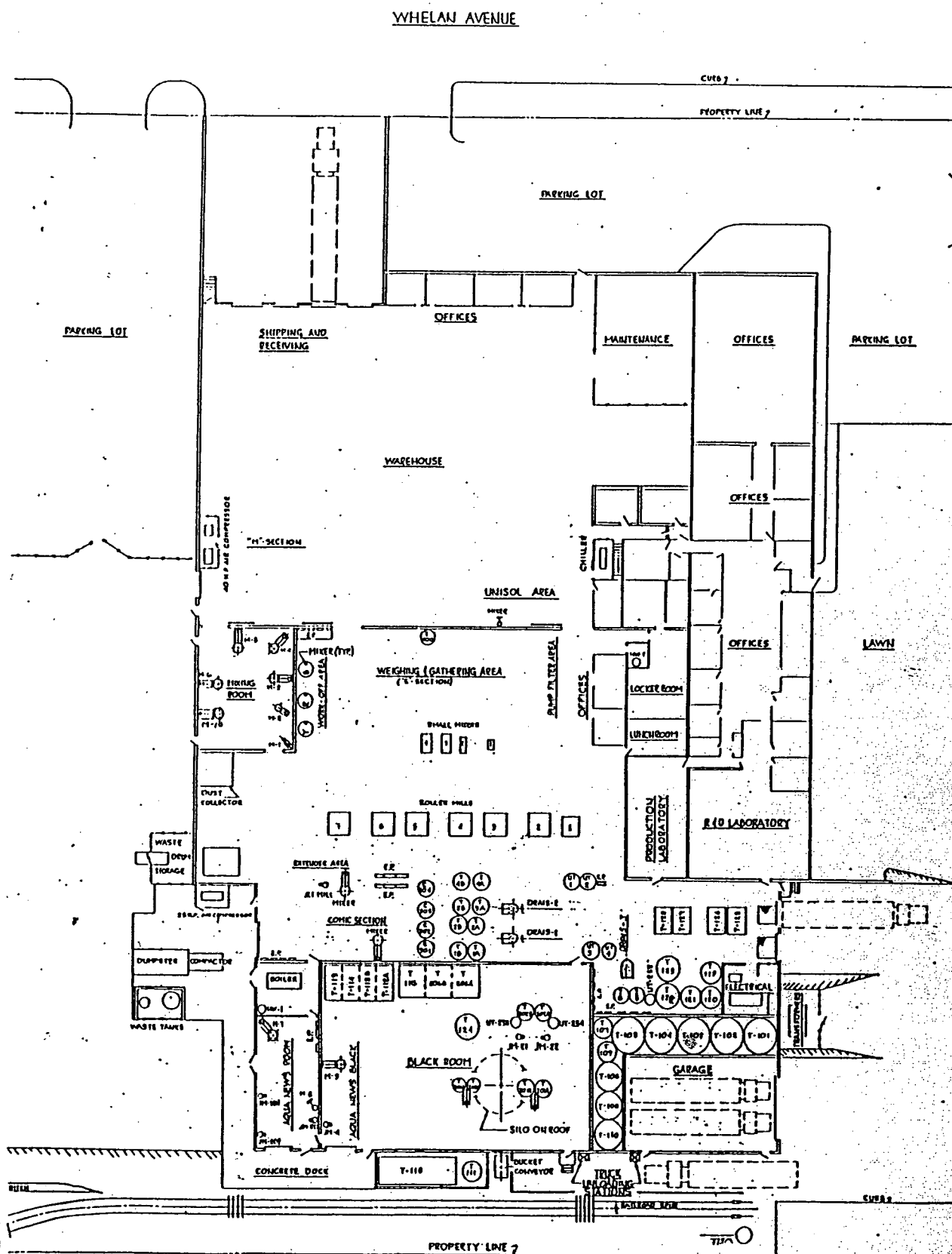
- A. Installation of storm drains at base of tank truck delivery and in front of enclosed garage.
- B. Storm drains would be connected to an oil interceptor and feed to oil storage tank prior to release to surface water.
- C. Collected oil will be pumped to a storage tank periodically for reclaiming and use.
- D. Rainwater runoff will be diverted to this system through grading of pavement.
- E. Curbing between tank truck area and railsiding will be extended.

- F. As a further precaution, during the unloading of oil, the storm drains would be equipped with a gate to close, this would prevent an on-surge of oil into the oil interceptor. The spill would be contained in this area due to the grading and can easily be cleaned up.
- G. All oil truck deliveries will be manned at all times during unloading and securing.

II. STORAGE TANKS IN THE "BLACK" MANUFACTURING AREA

Curbs will be installed in the two man doors and a ramp in the overhead door leading to the outside. Based on the area of this room, a 3" height would permit containment of approximately 9,000 gallons. Since the largest single compartment in this area has a capacity of 5,400 gallons, this height will provide a reasonable safety factor without undue operational burden.

APPENDIX A



APPENDIX F

OAKLAND, CALIFORNIA
SAN DIEGO, CALIFORNIA

DENVER, COLORADO
KANSAS CITY, MISSOURI
PHILADELPHIA, PENNSYLVANIA

OMAHA, NEBRASKA
NEW YORK, NEW YORK

WOODWARD-CLYDE-SHERARD AND ASSOCIATES
SOIL AND FOUNDATION ENGINEERING

1425 BROAD STREET
CLIFTON, NEW JERSEY

TELEPHONE 471-2000

PRINCIPALS
JAMES L. SHERARD
DOUGLAS C. MOORHOUSE
DAVID M. GREER

ASSOCIATE
ROY E. HUNT

October 18, 1963
63M158

U. S. Printing Ink Company
66 Industrial Avenue
Little Ferry, New Jersey

Attention: Mr. D. H. Seixas

Inspection of Excavation and Fill Operations

U. S. Printing Ink Company Site

East Rutherford, New Jersey

Gentlemen:

Submitted herewith is our report on the inspection of the excavation and placement of compacted fill at the subject site.

This work was done in accordance with our proposal of August 9, 1963, submitted to Bergen Engineering Company. Part way through the job however, we received notice from you and Bergen Engineering Company that your company would assume the position of client and that we would work directly for you.

Following the completion of excavation of unsuitable materials at the site, the bottom of excavation was inspected and approved by our field engineer. Fill was then placed in lifts and compacted by the passes of a vibratory roller (Vibro-Plus CK-40). Except for approximately one half of the first lift, the fill consists of a gravelly silty coarse to fine sand containing some cobbles and boulders, which was obtained from a pit in Wayne, New Jersey. The other material in the first lift was a trap rock of gravel, cobble, and boulder size which was obtained from a tunnel construction site.

Laboratory compaction test and sieve analysis were performed on the fill material to determine the compaction criterion in the field. Curves plotted from test results are attached to this report as Plates 1 and 2.

A total of 13 field density tests were made during the course of the

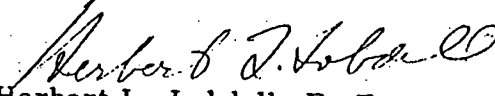
work to determine if satisfactory compaction was being achieved. The results of these field density tests are tabulated as Plate 3. At all places on the fill where the density was below 95% of Modified AASHO maximum dry density, the layer was recompacted with additional passes of the roller.


On the basis of our tests and observations, it is our opinion that the fill was placed and compacted satisfactorily and in accordance with the guide specifications attached to our soil and foundation report for the project.

A separate letter will be submitted at a later date on the pre-loading operation which is now in progress. Our settlement observations, which have been taken periodically, indicate the fill to date has settled between 0.2 and 0.3 feet.

Very truly yours,

WOODWARD-CLYDE-SHERARD & ASSOCIATES


Herbert L. Lobdell, P. E.


Douglas C. Moorhouse, P. E.

HLL:sd

5 copies submitted

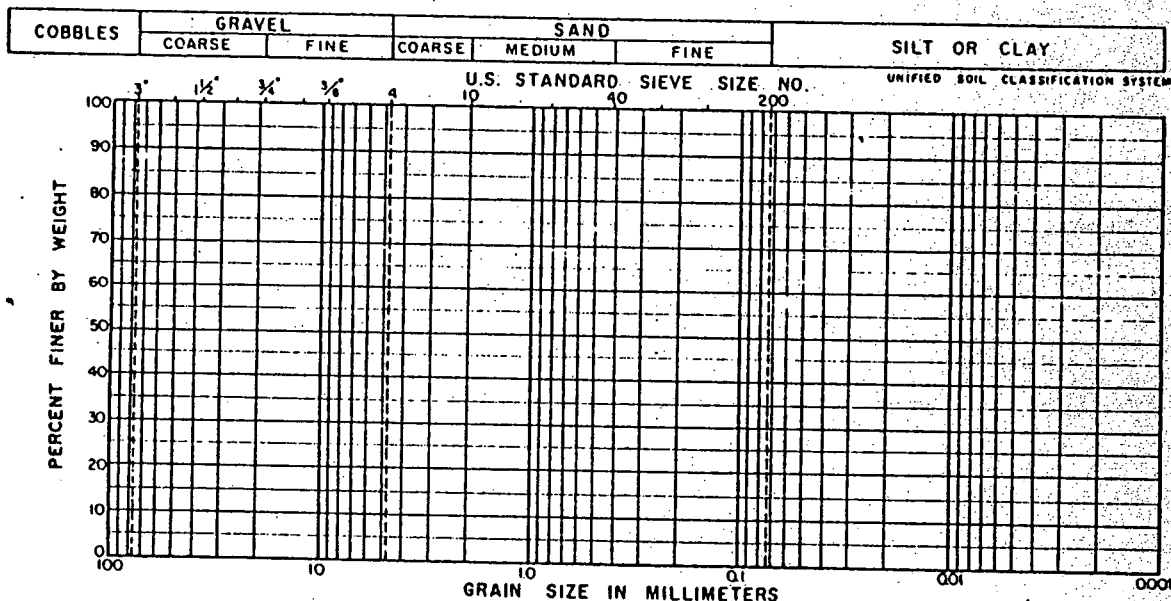
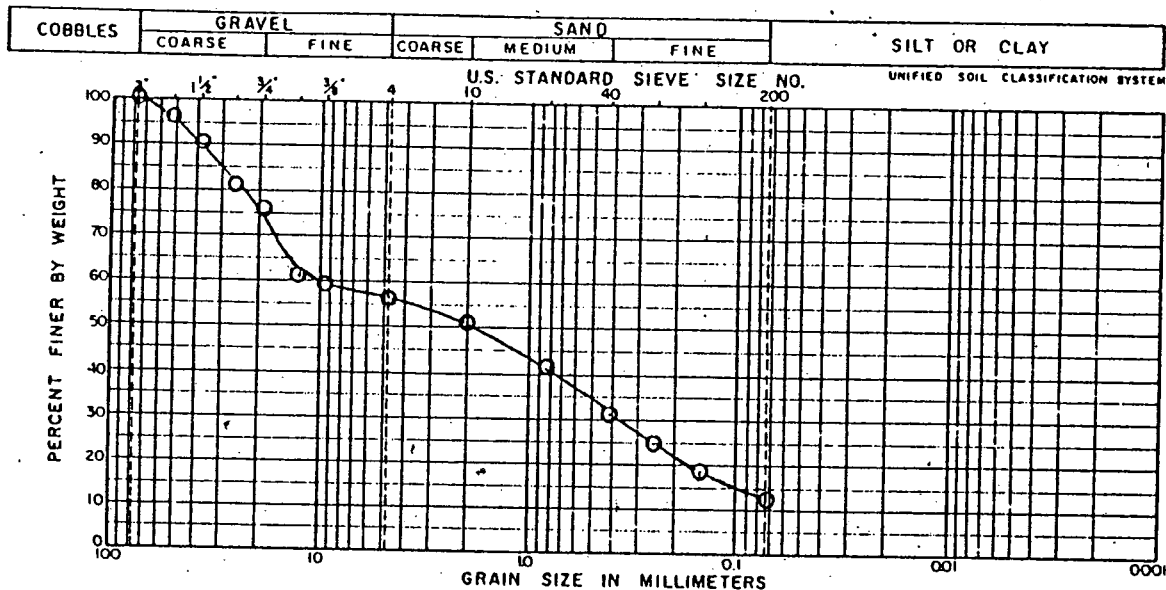
SUMMARY OF FIELD DENSITY TESTS

<u>Test No.</u>	<u>Date</u>	<u>Weight pcf</u>	<u>Content %</u>	<u>% Compaction</u>
1	9/9	125	9.4	90
2	9/10	109	8.0	*
3	9/11	127	8.5	92
4	9/12	129	8.6	93
5	9/13	129	10.9	93
6	9/15	125	9.8	90
7	9/16	130	10.7	94
8	9/16	128	10.6	93
9	9/17	134	7.3	97
10	9/17	133	9.3	96
11	9/18	139	8.8	100
12	9/18	136	10.6	98
13	9/19	128	6.8	93

* Material judged to be well compacted; laboratory compaction test (Plate 2) not applicable because material was fine sand.

PLATE 3

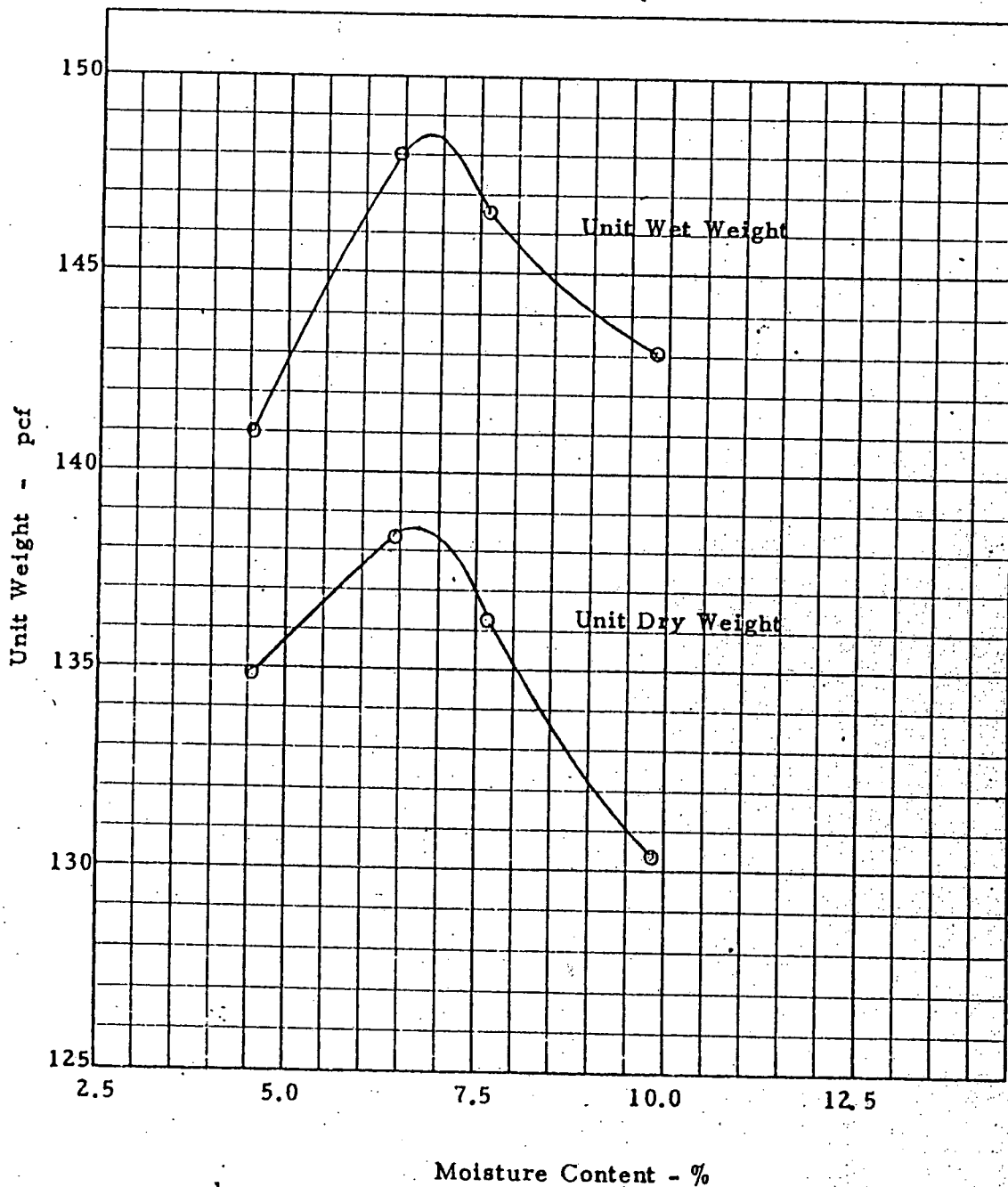
MECHANICAL ANALYSIS



MOISTURE vs. DENSITY

Material: Brown silty gravelly coarse to fine sand

Test Conditions: Modified AASHO (6 inch diameter mold)
using minus 3/4-inch sieve material



WOODWARD-CLYDE & ASSOCIATES

CONSULTING ENGINEERS AND GEOLOGISTS

1425 BROAD STREET CLIFTON, NEW JERSEY 07012 PHONE (201) 471-2000

Douglas C. Moorhouse
Gerald L. Baker
Yves Lacroix
Arnold Olitt

Herbert L. Lobdell
Noel M. Ravneberg

November 15, 1968
68-286

U. S. Printing Ink Corporation
343 Murray Hill Parkway
East Rutherford, New Jersey 07073

Attention: Mr. Sam Leiner

Re: Inspection of Site Preparation Work
Addition to U. S. Printing Ink Plant
East Rutherford, New Jersey

Gentlemen:

Submitted herewith is our report on the engineering services provided during site preparation work at the site of the U. S. Printing Ink Plant addition in East Rutherford, New Jersey. This work was done in accordance with our proposal dated 30 September 1968, and was authorized by Mr. D. H. Seixas of your company on 7 October 1968.

Prior to placing the load-bearing earth fill, all fill material, including the pre-existing parking lot fill, and the organic material beneath it were removed to about el -7 in the proposed building area. The bottom of the excavation was found to consist of a stiff mottled brown and gray clayey silt. The initial lift was placed in stages as the dragline completed excavation work and was 2 to 3 ft in thickness. Pumps were used during the initial stages of the work to keep the water level below the fill. Subsequent fill was added in lifts of approximately 12 inches; each lift was compacted with at least 4 passes of a Vibro-Plus CH-43 compactor.

Fill materials were obtained from five sources: Oakland quarry; Haledon reservoir; Old Tappan; Paramus; and Fairfield. The fill consisted generally of gravelly silty sands with varying amounts of cobbles and boulders, with the exception of the Old Tappan material which contained lumps of clayey silt. When the Old Tappan material became clayey the contractor was advised that it was unsuitable and the contractor subsequently discontinued its use. Some of the Haledon reservoir material became too wet and silty for use in the building area and it was dumped in the parking area. During most of the project the Oakland material was mixed with the materials from the other sources. The contractor and Mr. Leiner were advised that oversize boulders should be removed from the fill before compacting.

Laboratory testing consisted of one relative density test and one grain-size analysis run on a representative sample of the initial fill from Oakland to establish the criterion for field compaction. The relative density test indicated a maximum density of 132.4 pcf and a minimum density of 110.5 pcf. These values are shown with the grain-size analysis results in Fig. 1.

A total of 11 field density tests were taken by the sand cone method to check the field compaction. The results of the field tests are given in Table 1. Field compaction was determined for the first four field density tests by using the relative density value. "One-point" compaction tests were used as a criterion for field density tests for the remainder of the project because of the variability of the fill; these tests utilized a 4-inch mold, a 10-lb hammer falling 18 inches, and 25 blows to each of five layers.

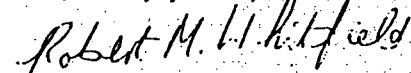
The field density tests indicate values somewhat lower than specified. However, this may be explained by the coarse and variable nature of the fill material which made testing of materials which were representative of the control test samples very difficult.

The next to the final lift adjacent to the existing building was not compacted before footing excavation work commenced; the general contractor and Mr. Leiner were advised of this. Perimeter areas and the office area were left about 1 1/2 ft below final subfloor grade at the time of our last inspection (24 Oct 1968) because of proposed excavation work in these areas. The unfinished fill work, which includes the upper 6 inches of subfloor fill (which we understand will be placed just before pouring of floor slabs), should be completed in the manner required in the specifications.

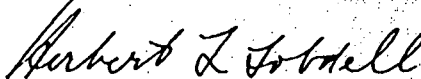
It is our opinion that the load-bearing fill completed between 3 October and 23 October 1968, while we were on the project, was constructed satisfactorily, and should provide suitable support for foundations. If the remainder of the subfloor fill is properly compacted and the material which is loosened by excavation work is properly recompacted, there should be suitable support for floor slabs.

If we can be of further service on this project, please call us.

Very truly yours,



Robert M. Whitfield



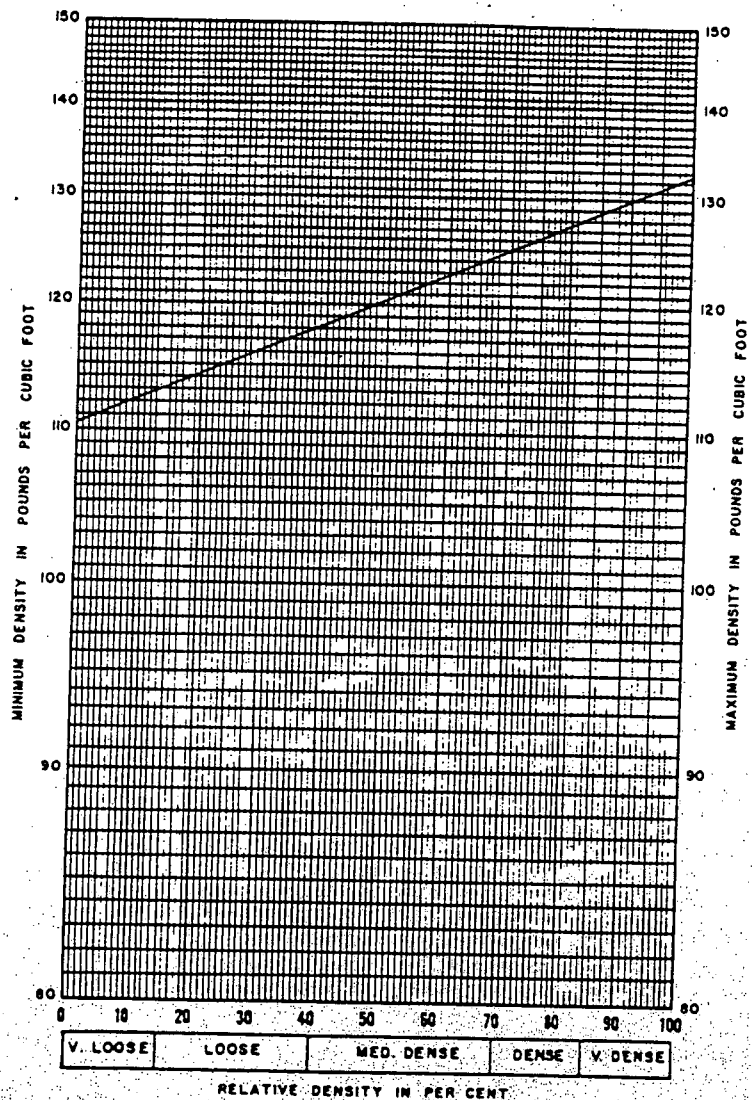
Herbert L. Lobdell, P. E.

RMW:esch

Submitted: 3 copies

Table 1
Results of Field Density Tests

<u>Date of Test</u>	<u>Field Dry Density (pcf)</u>	<u>Moisture Content (%)</u>	<u>Relative Density %</u>	<u>% Compaction</u>
10 Oct. 68	140.7	7.4	100 +	
11 Oct. 68	112.3	4.9	38	
14 Oct. 68	118.1	8.7	40	
16 Oct. 68	119.1	8.7		88.8
17 Oct. 68	114.1	5.4		93.4
17 Oct. 68	107.9	4.5		93.5
18 Oct. 68	105.8	8.8		86.4
21 Oct. 68	109.0	5.0		87.9
22 Oct. 68	110.9	6.1		83.9
24 Oct. 68	113.5	3.3		91.1



SAMPLE NO. _____ DEPTH _____

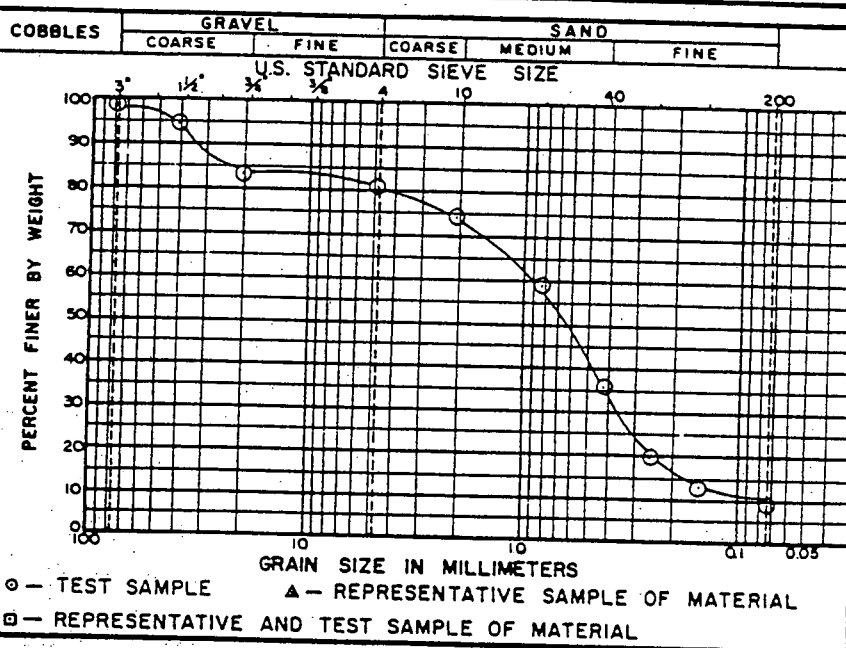
LOCATION Oakland Pit

MATERIAL Gravelly coarse to fine sand, trace silt

DESCRIPTION _____

TEST PROCEDURE: ASTM COMMITTEE D-18

SUGGESTED METHOD BY D.M. BURMISTER, 1964



MAXIMUM AND MINIMUM DENSITY TEST RESULTS
AND GRAIN SIZE DISTRIBUTION CURVES

WOODWARD · CLYDE & ASSOCIATES
CONSULTING ENGINEERS AND GEOLOGISTS
CLIFTON, NEW JERSEY

CK'D. BY: _____ DATE: 10 Oct 1968 PROJ. NO: 68-286 FIG. NO: 1

ECRA QUESTIONNAIRE FOR USPI CORP

1.) Property identification

Block No. 106A Madison Circle HM
Lot No. 4C 3.5AC

2.) Standard Industrial Classification - 2893

3.) Sanitary Sewerage Commission

Bergen County Utilities Authority (BCUA)
Box 122, Foot of Mehrhof Road
Little Ferry, NJ 07643

Septic tank system - None known

4.) No underground tanks are located at this facility

5.) Environmental permits, Annual Generator Report 1985,
see attachment.

No known administrative issues in last 10 years.

Berry Creek is the surface water receiving the cooling
water as identified in NPDES Permit.

NARRATIVE OF PROPERTY CHANGES

<u>Date</u>	<u>Activity</u>
April 1, 1964	Don Seixas, Norma Seixas, Irving Brooks, Barbara Brooks purchased 2.5 acres from Bergen Engineering Co.
Nov. 10, 1965	Property was transferred and deeded to United States Printing Ink Corp. (Lot #'s 4B, 4C Block #106A)
1967	Manufacturing and Office building erected <i>by Bergen Engineering Co.</i>
?	Additional 1.0 acres purchased for total property of 3.5 acres (Lot 4C, Block 106A)
1968	USPI Corp was purchaed by Millmaster Onyx New York, New York
1976	Millmaster Onyx sold company to Kewanee Industry
Sept. 30, 1977	Kewanee Industry was purchased by Gulf Oil
Dec. 1982	Gulf Oil sold USPI to Millmaster Onyx Group
Nov. 14, 1984	Minor subdivision change
1985	New two story Office building under construction
Aug. 1986	New Office addition completed

UNITED STATES PRINTING INK CORPORATION
A SUBSIDIARY OF MILLMASTER ONYX GROUP, INC.

Business, Environmental and Operating Licenses & Permits

EAST RUTHERFORD

<u>Issuing Agency</u>	<u>License & Permit Numbers</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Item Covered</u>
EPA (Federal)	NJD095171948	8/19/80		Hazardous Waste Activity (RCRA)
EPA (New Jersey)	NJ0003646	8/ 1/79		Discharges to Surface Waters
NJDEP (Air Pollution Control Division)	043644	8/ 3/79	8/ 1/89	Air Exhaust Permits - Tanks
NJDEP (Air Pollution Control Division)	043645	8/ 3/79	8/ 1/89	" " " - Mills
NJDEP (Air Pollution Control Division)	043646	8/ 3/79	8/ 1/89	" " " - Mills
E. Rutherford Zoning Ordinance	2222	1/18/70		Certificate of Occupancy (Office & Warehouse Addition)
E. Rutherford Zoning Ordinance	270	2/17/83		Certificate of Occupancy (E. Rutherford Facility)
Borough of E. Rutherford	002389	3/ 5/86	12/31/86	Fire Alarm License
Borough of E. Rutherford	001308	2/27/86	12/31/86	Vending Machines (2)
State of New Jersey	521-303-741/000	1/21/83		Sales Tax Permit
State of New Jersey (Bureau of Fire Safety)	0212-46112-001-01	6/16/86		Organic Coating Manufacturing



ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

7JDD095171948

U.S. PRINTING INK CORP.
343 MURRAY HILL PARKWAY
EAST RUTHERFORD,

NJ

07073

INSTALLATION ADDRESS

343 MURRAY HILL PARKWAY
EAST RUTHERFORD,

NJ

07073

MAR 25 1985

cc: H. Edelman
L. Lepre.

New Jersey Department of Environmental Protection
Division of Water Resources
Industrial Waste Management

CN-029

Trenton, N.J. 08625
(609) 292-4860

PUBLIC NOTICE

Draft Permit
EP

MAR 22 1985

Notice: ISSUANCE OF DRAFT NJPDES PERMIT NJ0003646

Notice is hereby given that: United States Printing Ink Corporation
343 Murray Hill Parkway
East Rutherford, New Jersey 07073

has applied to the New Jersey Department of Environmental Protection (NJDEP) for a draft renewal New Jersey Pollutant Discharge Elimination System (NJPDES) permit to discharge via a stormsewer to Berry's Creek, a tributary of the Hackensack River, classified as TW-3 waters.

Non-contact cooling water with an average flow of 0.01 MGD avg. is discharged from one outfall, DSN 001.

The facility's activities include SIC Code 2893, the printing subcategory of the Paints and Pigments primary industry category. The permittee mixes and blends ink bases with solvents, drying agents, and pigments. These intermediates are not manufactured at this facility. Process wastes are collected for off site disposal by a licensed disposer.

For an existing facility, issuance of the NJPDES permit is the enforcement mechanism by which pollutant discharges are brought into compliance with standards.

Additional information concerning the draft Permit may be obtained between the hours of 8:00 A.M. and 4:30 P.M., Monday through Friday from: Morton Fisch at (609)292-4860.

This notice is being given to inform the public that NJDEP has prepared a draft NJPDES permit. This draft permit contains conditions necessary to implement the provisions of the "Regulations Concerning the New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A-1 et seq.), which were promulgated pursuant to the authority of the New Jersey "Water Pollution Control Act" (N.J.S.A. 58:10A-1 et seq.).

The draft permit prepared by NJDEP is based on the administrative record which is on file at the offices of the NJDEP, Division of Water Resources, located at 1474 Prospect Street in the Township of Ewing, Mercer County, New Jersey. It is available for inspection, by appointment, between 8:30 A.M. and 4:00 P.M., Monday through Friday. Appointments for inspection may be scheduled by calling (609)984-4428.

NEW JERSEY STATE DEPARTMENT



JUL 2 1984
cc: H. Edman
L. Legno
E. Caddell
OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM
BUREAU OF ENGINEERING AND TECHNOLOGY

All Correspondence must indicate your DEP PLANT ID NUMBER

Permit/Certificate Number 043644

DEP PLANT ID 00705

(Mailing Address)

UNITED STATES PRINTING INK CORP
343 MURRAY HILL PARKWAY
EAST RUTHERFORD NJ 07073

(Plant Location)

U.S. PRINTING INK CORP.
343 MURRAY HILL PARKWAY
EAST RUTHERFORD

Applicant's Designation of Equipment

N.J. Stack No. 001

Original Approval 08/03/79

ST. TANK, ST#3 VARNISH INK

No. of Stacks 001

Effective 08/03/79

No. of Sources 01

Expiration 08/01/89

CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (5 YEAR RENEWAL)

THIS (5 YEAR RENEWAL) CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A.26:2C-9.2). THE POSSESSION OF THIS DOCUMENT DOES NOT RELIEVE YOU FROM THE OBLIGATION OF COMPLYING WITH ALL OTHER PROVISIONS OF TITLE 7, CHAPTER 27, OF THE NEW JERSEY ADMINISTRATIVE CODE.

YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION ABATEMENT FACILITY. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THIS SECTION.

IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE FIELD OFFICE. (SEE OTHER SIDE).

THIS DOCUMENT MUST BE READILY AVAILABLE FOR INSPECTION AT THE PLANT.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027
Trenton, New Jersey 08625

Approved by:

Walter F. Hart

Supervisor
New Source Review Section

06/26/84-12

NEW JERSEY STATE DEPARTMENT



JUL 2 1984
OF ENVIRONMENTAL PROTECTION

C. H. Edelman
L. L. G. G. G.
E. G. G. G.

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM
BUREAU OF ENGINEERING AND TECHNOLOGY

All Correspondence must indicate your DEP PLANT ID NUMBER

Permit/Certificate Number 043645

DEP PLANT ID 00705

(Mailing Address)

UNITED STATES PRINTING INK CORP
343 MURRAY HILL PARKWAY
EAST RUTHERFORD NJ 07073

(Plant Location)

U.S. PRINTING INK CORP.
343 MURRAY HILL PARKWAY
EAST RUTHERFORD

Applicant's Designation of Equipment
N.J. Stack No. 002
Original Approval 08/03/79

ST. #1 VENT. ROLLER MILLS
No. of Stacks 001
Effective 08/03/79

No. of Sources 02
Expiration 08/01/89

CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (5 YEAR RENEWAL)

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THIS DOCUMENT MUST BE READILY AVAILABLE FOR INSPECTION AT THE PLANT.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027
Trenton, New Jersey 08625

Approved by:

Wallace F. Hart

Supervisor
New Source Review Section

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

JUL 2 1984

C. H. Edman
L. Lyons
E. Gaddell

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM
BUREAU OF ENGINEERING AND TECHNOLOGY

All Correspondence must indicate your DEP PLANT ID NUMBER

Permit/Certificate Number 043646

DEP PLANT ID 00705

(Mailing Address)

UNITED STATES PRINTING INK CORP
343 MURRAY HILL PARKWAY
EAST RUTHERFORD NJ 07073

(Plant Location)

U.S. PRINTING INK CORP.
343 MURRAY HILL PARKWAY
EAST RUTHERFORD

Applicant's Designation of Equipment

ST. #2 VENT. ROLLER MILLS

N.J. Stack No. 003

No. of Stacks 001

Original Approval 08/03/79

Effective 08/03/79

No. of Sources 04

Expiration 08/01/89

CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (5 YEAR RENEWAL)

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THIS DOCUMENT MUST BE READILY AVAILABLE FOR INSPECTION AT THE PLANT.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027
Trenton, New Jersey 08625

Approved by:

William F. Hart

Supervisor
New Source Review Section

06/26/84-12

No 002481

BOROUGH OF EAST RUTHERFORD

BERGEN COUNTY

DATE OF ISSUE

March 5, 1986



Fee \$ 50.00

NEW JERSEY

DATE OF EXPIRATION

DECEMBER 31, 1986

License is hereby granted to UNITED STATES PRINTING INK CORP.

for premises at 343 Murray Hill Parkway

For FIRE ALARM

The Licensee having paid the fixed fee and having complied with all requirements of Related Ordinances of the Borough of East Rutherford, necessary for obtaining license, this license is granted upon express condition of a forfeiture in case the licensee, his agent or servant, shall violate any law or ordinance regulative of the business licensed and that it may be suspended or revoked whenever the municipal Borough of East Rutherford requires that such action be taken.

THIS LICENSE MUST BE POSTED
IN PUBLIC VIEW

NOT TRANSFERABLE

BOROUGH OF EAST RUTHERFORD

Borough Clerk

DELAWARE UNITED STATES PRINTING INK
-CORPORATION
343 MURKAY HILL PARKWAY
EAST RUTHERFORD N J 07073

521-303-741/000
01-21-83
A-780719 *



STATE OF NEW JERSEY
DEPARTMENT OF COMMUNITY AFFAIRS
BUREAU OF FIRE SAFETY

LIFE HAZARD USE CERTIFICATE OF REGISTRATION

ISSUED: 06/16/86

OWNER NO: F-133135202

REGISTRATION NO: 0212-46112-001-01

MILLMASTER ONYX GROUP INC
99 PARK AV
NEW YORK NY 10016

UNITED STATES PRINTING INK
343 MURRAY HILL
E RUTHERFORD NJ

BUILDING HEIGHT: 022 FEET

NUMBER OF STORIES: 01

USE TYPE CODE: B12F

DESCRIPTION: ORGANIC COATING MANUFACTURING OPER-
ATIONS MAKING MORE THAN ONE GALLON
OF AN ORGANIC COATING IN A WORKING
DAY.

THE LAW REQUIRES THAT THIS CERTIFICATE OF REGISTRATION BE POSTED IN A CONSPICUOUS LOCATION IN THE REGISTERED PREMISES BUT ONLY UPON SUBSEQUENT RECEIPT OF A CERTIFICATE OF INSPECTION.

THIS CERTIFICATE IS NOT TRANSFERRABLE. IN THE CASE OF ANY TRANSFER OF TITLE, IT SHALL BE THE DUTY OF THE NEW OWNER(S) TO FILE WITH THE COMMISSIONER WITHIN THIRTY DAYS OF SUCH TRANSFER AN APPLICATION FOR A NEW CERTIFICATE OF REGISTRATION. IN THE CASE OF ANY CHANGE IN INFORMATION PROVIDED ON THE REGISTRATION APPLICATION FORM, IT SHALL BE THE DUTY OF THE OWNER TO NOTIFY THE DEPARTMENT OF COMMUNITY AFFAIRS WITHIN THIRTY DAYS OF SUCH CHANGE.

FAILURE TO COMPLY WITH THESE REQUIREMENTS CONSTITUTES A VIOLATION OF P.L. 1983, c.383 OF THE LAWS OF NEW JERSEY AND SUBJECTS THE PARTY SO VIOLATING TO THE PENALTIES THEREIN.

COMMISSIONER OF COMMUNITY AFFAIRS
LEONARD S. COLEMAN, JR.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- CERTIFICATION FORM -

- I. EPA ID Number: NJD095171948
- II. Generator Name: United States Printing Ink Corporation
- III. Contact Person: Robert W. Schmidt
- IV. Phone Number: 201-933-7100
- V. Certification:

I certify that the information given in this annual report is true,
accurate and complete.

Robert W. Schmidt
(Print or type name)

Robert W. Schmidt
(Signature)

2/14/86
(Date)

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: U.S. PRINTING INK CORP. EPA ID No.: NJD095171948
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: APTEC, INC. EPA ID No.: NJD099287484
3. TSD Facility Name: Chem-Met Services EPA ID No.: MID096963194
TSD Address: 18550 Allen Road, Wyandotte, MI 48192

A.) <u>Waste</u> <u>Number</u>	B.) <u>Waste</u> <u>Description</u>	C.) <u>DOT Haz</u> <u>Class</u>	D.) <u>Total</u> <u>Quantity</u>	E.) <u>Units</u>
K086	Hazardous Waste Solids, ORM-E	NA9189	800	P

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- REPORT FORM -

1. Generator Name: United States Printing Ink Corp. EPA ID No.: NJD095171948
Site Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
2. Transporter Name: S-J Transportation EPA ID No.: NJD071629976
3. TSD Facility Name: Rollins Environmental Service, Inc. EPA ID No.: NJD053286239
TSD Address: Route 322, Bridgeport, NJ 08014

A.) <u>Number</u>	B.) <u>Waste Description</u>	C.) <u>DOT Haz Class</u>	D.) <u>Total Quantity</u>	E.) <u>Units</u>
D005, D007, D008	Hazardous Waste Liquid, N.O.S. Combustible	NA9189	4,950	G

NOTE: For each combination of transporter and TSD facility, list the total quantity manifested for each waste type.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
HAZARDOUS WASTE GENERATOR ANNUAL REPORT 1985
- WASTE SUMMARY FORM -

Generator Name: United States Printing Ink Corporation

EPA ID No.: NJD095171948

Please indicate below the total quantity of hazardous waste manifested during the 1985 report year for each unit of measure:

4950 G - Gallons (liquids only)
800 P - Pounds
 T - Tons (2,000 lbs.)
 Y - Cubic Yards
 L - Liters (liquids only)
 K - Kilograms
 M - Metric Tons (1,000 kg)
 N - Cubic Meters

*Enter zero (0) for units of measure which were not utilized.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE MINIMIZATION SURVEY

HAZARDOUS WASTE GENERATOR WASTE REDUCTION PROGRAM, FY 1985

- Please complete both sides -

Company: United States Printing Ink Corporation NJD095171948
(Name) (EPA ID Number)

Mailing Address: 343 Murray Hill Parkway, East Rutherford, NJ 07073
(Street) (City) (Zip Code)

Location of Generator Site: SAME
(if different from mailing address)

Contact Person: Robert W. Schmidt 201-933-7100
(Name) (Telephone Number)
Robert W. Schmidt VP & Regional Manager
(Signature) (Title)

Please provide information about your company's hazardous waste minimization program. (If more space is needed, please answer on a separate sheet of paper and attach it to the questionnaire.)

1. Separation

Is your company's waste collection system designed to decrease the volume of hazardous waste by keeping hazardous waste separate from non-hazardous waste?
☒ Yes ☐ No

If yes, has the system been improved in the past year to further reduce the amount of hazardous waste?
☒ Yes ☐ No

What reduction in volume was achieved in the last year? 15%

2. Substitution

Has your company substituted a hazardous material with a non-hazardous or less hazardous material to reduce either the amount or toxicity of hazardous waste generated by your operation?
☒ Yes ☐ No

If yes, when was the substitute introduced, and to what extent has it reduced the toxicity or amount of hazardous waste generated in the last year?

Beginning of December - will eventually eliminate our D008 waste generation.

3. Efficiency

Has your company improved the efficiency of operations so as to reduce the amount of hazardous waste generated?

☒ Yes

☐ No

If yes, please describe it briefly and state when it was instituted.

Improved management.

What amount of waste reduction was achieved in the last year? 15%

4. Recycling on-site

Does your company's waste reduction program include a hazardous waste recycling operation on-site?

☐ Yes

☒ No

If yes, please briefly describe the recycling operation and state when it was instituted.

What amount of waste reduction was achieved in the last year?

5. Treatment on-site

Does your company's hazardous waste reduction program include on-site waste treatment which minimizes the toxicity or amount of hazardous waste generated?

☐ Yes

☒ No

If yes, please briefly describe the treatment operation and state when it was instituted.

To what extent has the treatment operation reduced toxicity or reduced the amount of hazardous waste generated in the past year?

PERMITTEE NAME/ADDRESS (Include
Facility Name/Location, if different)

NAME **U.S. PRINTING INK CORP.**
ADDRESS **343 MURRAY HILL PARKWAY**
EAST RUTHERFORD, NJ 07073

FACILITY

LOCATION

ATTN: **HERBERT L. EDELMAN**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16)
NJ0003646
PERMIT NUMBER

(17-19)
001 A
DISCHARGE NUMBER

MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	86	04	01		86	06	30
	(20-31)	(22-33)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (23-27)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
TEMPERATURE, WATER DEG. CENTIGRADE 00010 1 0	SAMPLE MEASUREMENT	*****	*****		68	24.6	27		Once/ Month	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT	REPORT	30		Once/ Month	GRAB
PH	SAMPLE MEASUREMENT	*****	*****		7.1	*****	7.5		Once/ Month	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	MINIMUM	*****	MAXIMUM		Once/ Month	GRAB
HYDROCARBONS, IN H ₂ O IR.CC14EXT.CHROMAT 00551 1 0	SAMPLE MEASUREMENT	<0.05	<0.06		*****	<0.5	<0.5		Once/ Month	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT	REPORT	KG/ DAY	*****	REPORT	10		Once/ Month	GRAB
TOTAL ORGANIC CARBON (TOC) 00680 1 0	SAMPLE MEASUREMENT	0.80	2.33		*****	8.5	18		Once/ Month	COMPO
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT	REPORT	KG/ DAY	*****	REPORT	20		Once/ Month	COMPO
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0	SAMPLE MEASUREMENT	.0276	.0342		*****	*****	*****		Once/ Month	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT	REPORT	MGD	*****	*****	*****	****	Once/ Month	
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Lawrence J. Lepore
Technical Director

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT, SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

201 935-7100

DATE

86 07

AREA
CODE

NUMBER

YEAR

MO

DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

**BOROUGH OF
EAST RUTHERFORD, N. J.**

JUN 20 1986

TAX BILL FOR

**SECOND HALF 1986
FIRST HALF 1987**

LAND	IMPROVEMENTS	EXEMPTION	ASSESSED VALUE	GROSS TAX	DEDUCTIONS SR. CIT. VETERAN	NET TOTAL 1986 TAX
685.000	1304.000		1,989.000	26,254.80		26,254.80

B-106-A
L-107-A.C
L-118
MADISON CIRCLE
3.5AC
HM

LESS 1st HALF
PREVIOUSLY BILLED

13,974.00

Balance of 1986 Tax
Distributed to 3rd & 4th
Quarter of 1986

12,280.80

Estimated Tax for 1st
Half of 1987 Distributed
to 1st & 2nd Quarter
of 1987

13,128.00

HILLMASTER ONYX INC
99 PARK AVE.
NEW YORK, N.Y. 10001

Interest at rate of 8% per annum on the
first \$1,500.00 and 18% on amount in
excess of \$1,500.00 will be added from
payable date to date of payment received.
There is a 10 day grace period.

Your Municipal officials have no control over School or County Taxes.
THIS IS HOW YOUR TAXES ARE DISTRIBUTED

YOUR TAXES	LOCAL GOVERNMENT	LOCAL SCHOOL	REG. CONSOL. SCHOOL TAX	BERGEN COUNTY
26,254.80	4,017.78	11,098.62	4,534.92	6,603.48
TAX RATE PER \$100 ASSESSED VALUATION				
1.32	.2020	1.1580	.2240	.3420
TOTAL TAXES ON WHICH RATE IS CALCULATED	803,680	2,289,327	935,104	1,263,896

3rd QUARTER TAX
PAYABLE BY AUG. 1st 1986
6,140.80

4th QUARTER TAX
PAYABLE BY NOV. 1st 1986
6,140.00

1st QUARTER TAX
PAYABLE BY FEB. 1st 1987
6,564.00

2nd QUARTER TAX
PAYABLE BY MAY 1st 1987
6,564.00

INTEREST

INTEREST

INTEREST

INTEREST

TOTAL

TOTAL

TOTAL

TOTAL

COLLECTOR

COLLECTOR

COLLECTOR

COLLECTOR

INSTRUCTIONS ON REVERSE SIDE

PAID
JUL 31 1986

September 20, 1968

Bergen Engineering Company
375 Murray Hill Parkway
East Rutherford, New Jersey 07073

Attention: Mr. Barney Branca

Gentlemen:

This letter constitutes our authorization to you to commence excavation and fill work for our new addition. It is understood that this authorization will be implemented by awarding the excavation and fill subcontract to Meadowlands Equipment Corporation at the following rates:

Mucking out and removal of
meadow mat from premises . . \$1.25 per cubic yard

Compacted fill, measured
and placed \$2.90 per cubic yard

Fill for other areas
(truck measure). \$2.25 per cubic yard

Final measurement of the amount of fill used shall be certified to by a licensed, registered engineer. All work performed and materials supplied under this authorization shall be in accordance with the recommendations and specifications as contained in the Soil and Foundation Study prepared by Woodward-Clyde & Associates dated May 16, 1968, attached hereto and made a part of this authorization.

Sincerely yours,

UNITED STATES PRINTING INK CORP.

Donald H. Seixas
President

DHS:smb
attachment

B00

WOODWARD-CLYDE & ASSOCIATES

CONSULTING ENGINEERS AND GEOLOGISTS

1425 BROAD STREET CLIFTON, NEW JERSEY 07012 PHONE (201) 471-2000

Gerald L. Baker
David M. Greer
Yves Lacroix
Douglas C. Moorhouse
Herbert L. Lobdell
Noel M. Ravneberg

May 16, 1968
68-125

U. S. Printing Ink Company
Murray Hill Parkway
East Rutherford, New Jersey

Attention: Mr. Sam Leiner

Soil and Foundation Study

Proposed Plant Addition

U. S. Printing Ink Company

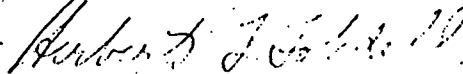
East Rutherford, New Jersey

Gentlemen:

Presented herewith is our report on the soil and foundation study made for the proposed addition to your East Rutherford plant. This work was done in accordance with our proposal dated April 4, 1968 and was authorized by Mr. Donald H. Seixas on April 12, 1968.

We appreciate the opportunity of making this study for you. Please call on us if we may be of further service.

Very truly yours,



Herbert L. Lobdell, P. E.

HLL:esch

Submitted: 5 copies

INTRODUCTION

This study was made for a proposed one-story building addition to be constructed on the north side of the existing U. S. Printing Ink Company plant on Murray Hill Parkway, in East Rutherford, New Jersey. We have been informed by Mr. Leiner that about 18,000 square feet of the building addition will be used for warehouse - manufacturing purposes; and that the remainder will be office space. Several tanks are also planned for the area west of the existing building.

A soil and foundation investigation was made for the present plant by our office in 1963 (see our Report No. 63M73, dated May 31, 1963). Three of the borings made during the 1963 investigation were made in the general area of the proposed addition. We subsequently inspected the placement of load-bearing fill; and made level observations on reference points within the fill during and following placement of the fill.

The purposes of our study were to make level observation on the existing floor slab; to analyze the current and previous level observations, together with the field and laboratory data obtained during the previous investigation; to make recommendations regarding foundation design, selection of floor grade, and site preparation for the proposed addition; and to make recommendations concerning foundations for the tanks to be located west of the present building.

LEVEL OBSERVATIONS

The current level observations on the existing floor were made on April 17, 1968 by our field personnel. The results are presented

It is our opinion that it will not be necessary to preload the site as was done for portions of the existing building site.

Site Preparation Work. - The limits of the excavation and compacted fill should extend 15 feet beyond the proposed building lines. Based on the boring information and our knowledge of the excavation operations at the existing building site, we estimate that the bottom of the excavation will be about el -4 to -5. Ditching and sump-pumping will be required to dewater the site so that placement of the fill can proceed in the dry.

Extreme care should be exercised in excavating alongside the existing compacted fill, in order to prevent sloughing which could endanger the existing foundations. The existing compacted fill should stand on nearly a vertical slope for a short period of time, but not indefinitely. We therefore recommend that preparations be made to place the new fill adjacent to the existing compacted fill immediately after excavation. This phase of the work should be closely supervised.

At least some of the parking lot fill should be found suitable for reuse, either as part of the new load bearing fill or as fill for new relocated parking areas.

Suggested guide specifications for the site preparation work are attached to this report.

Junction of Addition to Existing Plant - The addition outside the limits of the present load-bearing fill will settle at a faster rate than the existing building; however, this can be accommodated by the judicious

west of the existing building; and that this area will be used for garbage disposal, storage, and the location of four or five future 5,000 - to 10,000-gallon storage tanks. Based on our knowledge of the site preparation work for the existing building, this area, except for the 15 feet outside of the building, consists of fill over the marsh deposit. It must be anticipated that the present fill, together with any new fill that is required to raise the area to design grade, will settle slowly for many years. For this reason, we recommend the use of a flexible asphaltic pavement, rather than a concrete pavement which may be expected to crack. The flexible pavement should also be easier to maintain than concrete.

The future storage tanks, if constructed above ground with foundations within the fill, may be expected to settle. In order to avoid a settlement problem with the tanks, we recommend that foundations for these tanks be placed on the natural suitable soil beneath the marsh deposit, which is estimated to be at about el -4.

Inasmuch as it will be necessary to lower footings of above-ground storage tanks to about el -4 in order to avoid a settlement problem, we suggest consideration be given to designing the tanks as underground tanks founded on the natural soil below the marsh deposit. Underground tanks, should of course, be designed for uplift when empty.

OAKLAND, CALIFORNIA
SAN DIEGO, CALIFORNIA

DENVER, COLORADO
KANSAS CITY, MISSOURI

OMAHA, NEBRASKA
NEW YORK, NEW YORK

W 9-0589

WOODWARD-CLYDE-SHERARD AND ASSOCIATES

SOIL AND FOUNDATION ENGINEERING

98 GREENWOOD AVENUE

MONTCLAIR, NEW JERSEY

CABLE "WOODCLYDE NEWYORK"

TELEPHONE PILGRIM 6-0200

April 2, 1963
63B45

U. S. Printing Ink Company
66 Industrial Avenue
Little Ferry, New Jersey

Attention: Mr. D. H. Seixas

Re: Proposal for
Soil and Foundation Investigation
U. S. Printing Ink Building
Moonachie, New Jersey

Gentlemen:

In accordance with your request of 30 March, 1963, we are pleased to submit herewith our proposal covering a Soil and Foundation Investigation at the subject site.

The scope of our services will include the following:

- A. Field Investigation - Under the supervision of a soil and foundation engineer, we will make five or six test borings to obtain samples suitable for laboratory analysis and to define the soil conditions at the site. Undisturbed samples will be obtained for the determination of strength and consolidation characteristics of any soft, compressible soils. Estimated boring depth is 35 feet.
- B. Laboratory Investigation - We will perform tests in our soil laboratory to aid in the identification of the foundation soils, the correlation of their engineering properties, and if necessary, tests to determine their strength and compressibility.
- C. Engineering Consultation, Analysis and Report - We will consult with your engineers concerning details of the structure, analyze all pertinent data, and present in report form our recommendations covering the most economical and suitable foundations; the depth and allowable unit loads for these foundations which will restrict settlements to acceptable limits; and any other problems of design or construction which may be influenced by the subsoil conditions.

Our charges for this work will be on a unit price basis as presented on the attached schedule. It is estimated that the total cost of

the work will be between \$1960.00 and \$2520.00. If it should become necessary to exceed the larger amount, we will not do so without your prior authorization.

It is expected that the work will be started within one week of authorization; the field work completed in three to five days; and the final engineering report will be submitted within thirty days of completion of the field work. Preliminary design information will be given to your engineers as soon as feasible during the field and laboratory investigations.

We appreciate having the opportunity of submitting this proposal and we hope to have the pleasure of working with you on this project. If the proposal meets with your approval, please have it signed where indicated below and return one copy to this office.

Yours very truly,

WOODWARD-CLYDE-SHERARD & ASSOCIATES

David M. Greer
David M. Greer, P. E.

DMG:bm
Enclosure

PROPOSAL ACCEPTED:

by _____
firm _____
date _____

May 1, 1962

SUMMARY OF FEES AND CHARGES

WOODWARD-CLYDE-SHERARD & ASSOCIATES
New York * Montclair * Philadelphia Offices

I - Engineering Services - (Per Hour)

a. Principal or Consultant	\$20.00
b. Senior Engineer	15.00
c. Project Engineer	12.50
d. Assistant Engineer	10.00
e. Junior Engineer	8.00
f. Draftsman	7.50
g. Report Preparation and Reproduction* - Lump Sum	\$50.00
h. Expenses* - Reimbursable at Cost - Estimated	\$20 to \$40.00

Note: Expenses considered as reimbursable are as follows:
Vehicle rental at \$0.10 per mile plus \$5.00 per day;
subsistence; fares of public carriers; long distance
communications; and special fees - insurance, permits
and licenses.

II - Laboratory Testing - (Per Test)

1. Identification and Physical Properties Tests

a. Moisture Contents	\$ 1.50
b. Liquid and plastic Limit	10.00
c. Sieve Analysis	10.00
d. Hydrometer Analysis	15.00
e. Natural Density & Moisture Content	6.00
f. Maximum and Minimum Density	15.00
g. Specific Gravity	8.00
h. Permeability (Undisturbed Sample)	35.00

2. Strength and Compressibility Tests

a. Unconfined Compression	\$12.00
b. Triaxial Compression (Single Stage)	35.00
c. Triaxial Compression with Pore-Pressure Measurement	55.00
d. Consolidation	100.00
e. Swelling	30.00

Note: The report reproduction covers 5 Copies.
Additional copies may be secured at \$0.10 per page.

III - Field Investigation

a. Test Borings

1. Mobilization of Equipment - Lump Sum
2. Soil Borings \$3.50 /ft.

This rate includes all costs and fees involved in
the drilling of the borings whether soil or soft-
rock, and all disturbed and undisturbed sampling.
The standard boring diameter is 4 inches, and the
taking of undisturbed Shelby Tube samples is routine
in all soft compressible soils.

3. Rock Boring or Coring None /ft

b. Other Costs

Costs incurred by us for bulldozer, or surveyors, is
gaining access to and locating boring sites, and deter-
mining boring elevations will be charged at cost plus
10% thereof.

In the performance of the work we will be responsible for
damage only to such underground utilities clearly shown
on drawings supplied to us by yourselves.

IV - Estimate of Total Cost

The total cost of this investigation is estimated to be
\$1900. to \$2520. This amount will not be exceeded
without prior written authorization from you.

V - Terms of Payment

Payment for services are due upon presentation of the
invoice. Invoices are normally rendered on a monthly
basis as either a partial or a final billing.

OAKLAND, CALIFORNIA
SAN FRANCISCO, CALIFORNIA

DENVER, COLORADO
KANSAS CITY, MISSOURI
PHILADELPHIA, PENNSYLVANIA

OMAHA, NEBRASKA
NEW YORK, NEW YORK

WOODWARD-CLYDE-SHERARD AND ASSOCIATES

SOIL AND FOUNDATION ENGINEERING

1425 BROAD STREET
CLIFTON, NEW JERSEY
TELEPHONE 471-8000

PRINCIPALS
JAMES L. SHERARD
DOUGLAS C. MOORHOUSE
DAVID M. GREER

ASSOCIATE
ROY E. HUNT

August 9, 1963
63B101

Bergen Engineering Company
131 Washington Avenue
Lodi, New Jersey

Attention: Mr. Barney Branca

Re: Proposal for
Inspection of Field Operations
U. S. Printing Ink Company
Murray Hill Parkway
East Rutherford, New Jersey

Gentlemen:

In accordance with your request of August 7, 1963, we are pleased to submit herewith our proposal covering inspection and testing of the fill operations at the subject site.

The services which we will perform will include examination of borrow areas, selection of representative samples for laboratory testing, performance of laboratory compaction tests, inspection of the excavation of undesirable soils, inspection of the quality of fill materials and lift thicknesses, making field density check tests, and inspection of footing excavations. We shall provide Consulting Engineering Services as required to obtain a satisfactory operation. Daily records will be kept of tests performed, progress made, special instructions given the contractor, and other pertinent information. Periodic progress reports will be submitted to you, and at the end of the work a final report will be submitted, which will include all field and laboratory test data and our conclusions regarding the performance of the work.

Our charges for the work will be on a unit price basis as follows:

I Engineering Services

- | | |
|--|-----------|
| a. Principal | \$20/hour |
| b. Consultation by Project Soil Engineer | 15/hour |
| c. Field Engineer | 10/hour* |
| d. Expenses: Reimbursable at cost including vehicle rental, subsistence, fares of public carriers, long distance communications, shipping charges. | |

*Minimum daily charge of 4 hours on any field visit.

AUG 12 1963

8/21/63

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back
S. J. Hunt
08/14/63

II Testing

a. Laboratory

- | | |
|-------------------------------------|----------|
| 1. Standard AASHO Compaction Test | \$40/ea. |
| 2. Modified AASHO Compaction Test | 50/ea. |
| 3. Maximum-Minimum Density (sand) | 15/ea. |
| 4. Maximum-Minimum Density (gravel) | 20/ea. |
| 5. Grain-Size Analysis (sieve) | 10/ea. |
| 6. Liquid Plastic Limits | 10/ea. |

Notes: If borrow materials are uniformly good then one or two tests are sufficient.

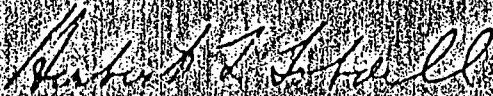
b. Field Density Checks

- | | |
|--------------------------------|-----------|
| 1. If inspection is continuous | No Charge |
| 2. If inspection is periodic | \$5/ea. |

If you have any questions about this proposal please do not hesitate to contact us. We hope to have the pleasure of serving you on this project. If the proposal meets with your approval please return one signed copy to this office.

Yours very truly,

WOODWARD-CLYDE-SHERARD & ASSOCIATES



Herbert L. Laddell, P.E.

HLL:bm

PROPOSAL ACCEPTED:

by _____
firm _____
date _____

OAKLAND, CALIFORNIA
SAN DIEGO, CALIFORNIA

DENVER, COLORADO
KANSAS CITY, MISSOURI
PHILADELPHIA, PENNSYLVANIA

OMAHA, NEBRASKA
NEW YORK, NEW YORK

WOODWARD-CLYDE-SHERARD AND ASSOCIATES

SOIL AND FOUNDATION ENGINEERING

1425 BROAD STREET
CLIFTON, NEW JERSEY

TELEPHONE 471-2000

PRINCIPALS
JAMES L. SHERARD
DOUGLAS C. MOORHOUSE
DAVID M. GREER

ASSOCIATE
ROY E. HUNT

November 21, 1963
63B155

U. S. Printing Ink Company
66 Industrial Avenue
Little Falls, New Jersey

Attention: Mr. Irwin Brooks

Re: Proposal for Construction Inspection
U. S. Printing Ink Building
East Rutherford, New Jersey

Gentlemen:

In response to Mr. Brooks' telephone request, we offer the following proposal for additional construction inspection services for your building in East Rutherford, New Jersey.

Review of Specifications

We have received from Bergen Engineering a set of the plans and specifications, and will, as discussed with Mr. Brooks, review these and will call your attention to any omissions or any needed changes that we are able to find. This work will be done immediately, and will be reported to you in a letter as soon as possible.

Inspection of Footing Excavations

We will be on call for the inspection of the footing excavations, to approve their suitability for pouring footings. We will need about 24 hours notice for each call. Our inspector will examine the excavations with particular attention to the condition of its bottom, and will, if necessary, recommend further excavation or compaction. It is not anticipated that any of the soil now in place at proposed footing depth will be unsuitable; but it is entirely possible that, due to weather and/or construction conditions, there might be loosened or soft soil present at the time the footing is ready for pouring of the concrete.

Inspection of Prepared Surface for Floor Slabs

We will likewise be on call for this service, and will inspect the prepared surface, not only for general suitability of preparation, but in particular for the condition of any backfill of utility line trenches, and backfill adjacent to foundation walls, to see that these fills have been properly compacted for floor support.

WOODWARD-CLYDE-SHERARD AND ASSOCIATES

Review of Concrete Cylinder Test Data

We will, in our office, review the test results from concrete test cylinders, which will be taken by a testing laboratory at the direction of Dergen Engineering; and will advise you immediately upon receipt of these test sheets, whether or not the cylinders pass specification requirements.

Review of Parking Lot Pavement Design and Construction

We will review and present our opinion on the design and construction of the paved area discussed with Mr. Brooks, where it is expected that heavy over-the-road trailers will be required to pass and turn at infrequent intervals.

Charges

Our charges for these services will be on a unit price basis, as shown on the attached sheet. It is difficult to estimate the total cost of this service because we do not know how fast the building is actually going to be constructed, or how many times we will be called for inspection. We estimate that the total cost should not exceed \$500.

If the proposal meets with your approval, please sign one copy and return it for our files. In the meantime, to expedite matters we are going ahead with the study of the plans and specifications as per your request.

Yours very truly,

WOODWARD-CLYDE-SHERARD & ASSOCIATES

David M. Greer
David M. Greer, P. E.

DMG:sd

Proposal Accepted:

by *AS*

firm *AS*

date *Nov 29th 1963*

November, 1963

SUMMARY OF FEES AND CHARGES
WOODWARD-CLYDE-SHERARD & ASSOCIATES
1425 Broad Street, Clifton, New Jersey

I Engineering Services

- | | |
|---|-------------------------|
| a. Principal | \$25/hr. ⁽¹⁾ |
| b. Project Engineer or Project Geologist | 15/hr. |
| c. Technical Personnel - (Engineers and Assistants) | 10/hr. |
| d. Report Preparation & Reproduction ⁽²⁾ | Lump Sum \$15. |
| e. Expenses ⁽³⁾ Reimbursable at Cost | Estimated \$20. |

Notes:

- (1) For rendering individual service for which the Engineer is eminently qualified and requiring little or no staff assistance, the charge shall be \$250/day.
- (2) The report reproduction covers 5 copies. Additional copies may be obtained at \$0.10/page.
- (3) Expenses considered as reimbursable are as follows:
Vehicle rental, subsistence, fares of public carriers, long distance communications, special fees: Insurance, permits and licenses, shipping charges.

II Laboratory Testing (Per Test)

1. Identification and Physical Properties Tests

- | | |
|---------------------------------------|---------|
| a. Moisture Contents | \$ 3.00 |
| b. Liquid and Plastic Limit | 20.00 |
| c. Sieve Analysis | 15.00 |
| d. Minus 200 Wash | 5.00 |
| e. Hydrometer Analysis | 15.00 |
| f. Natural Density & Moisture Content | 10.00 |
| g. Maximum and Minimum Density | 25.00 |
| h. Specific Gravity | 12.00 |
| i. Permeability (Undisturbed Sample) | 45.00 |
| j. Field Density Test | 5.00 |

2. Strength, Compressibility and Swell Tests

- | | |
|--|---------|
| a. Unconfined Compression | \$12.00 |
| b. Triaxial Compression (Single Stage) | 35.00 |
| c. Triaxial Compression with Pore-Pressure Measurement | 55.00 |
| d. Consolidation | 100.00 |
| e. Swelling | 50.00 |

3. Laboratory Compaction Tests \$50.00

- III The total cost of this investigation is estimated to be \$ \$500
This amount will not be exceeded without prior written authorization from you.

- IV Payment for services is due upon presentation of the invoice. Invoices are normally rendered on a monthly basis as either a partial or a final billing.

WOODWARD-CLYDE & ASSOCIATES

CONSULTING ENGINEERS AND GEOLOGISTS

1425 BROAD STREET CLIFTON, NEW JERSEY 07012 PHONE (201) 471-2000

Douglas C. Moorhouse
Gerald L. Baker
Yves Lacroix
Arnold Olitt
Herbert L. Lobdell
Noel M. Ravneberg

November 15, 1968
68-286

U. S. Printing Ink Corporation
343 Murray Hill Parkway
East Rutherford, New Jersey 07073

Attention: Mr. Sam Leiner

Re: Inspection of Site Preparation Work
Addition to U. S. Printing Ink Plant
East Rutherford, New Jersey

Gentlemen:

Submitted herewith is our report on the engineering services provided during site preparation work at the site of the U. S. Printing Ink Plant addition in East Rutherford, New Jersey. This work was done in accordance with our proposal dated 30 September 1968, and was authorized by Mr. D. H. Seixas. of your company on 7 October 1968.

Prior to placing the load-bearing earth fill, all fill material, including the pre-existing parking lot fill, and the organic material beneath it were removed to about el -7 in the proposed building area. The bottom of the excavation was found to consist of a stiff mottled brown and gray clayey silt. The initial lift was placed in stages as the dragline completed excavation work and was 2 to 3 ft in thickness. Pumps were used during the initial stages of the work to keep the water level below the fill. Subsequent fill was added in lifts of approximately 12 inches; each lift was compacted with at least 4 passes of a Vibro-Plus CH-43 compactor.

Fill materials were obtained from five sources: Oakland quarry; Haledon reservoir; Old Tappan; Paramus; and Fairfield. The fill consisted generally of gravelly silty sands with varying amounts of cobbles and boulders, with the exception of the Old Tappan material which contained lumps of clayey silt. When the Old Tappan material became clayey the contractor was advised that it was unsuitable and the contractor subsequently discontinued its use. Some of the Haledon reservoir material became too wet and silty for use in the building area and it was dumped in the parking area. During most of the project the Oakland material was mixed with the materials from the other sources. The contractor and Mr. Leiner were advised that oversize boulders should be removed from the fill before compacting.

Laboratory testing consisted of one relative density test and one grain-size analysis run on a representative sample of the initial fill from Oakland to establish the criterion for field compaction. The relative density test indicated a maximum density of 132.4 pcf and a minimum density of 110.5 pcf. These values are shown with the grain-size analysis results in Fig. 1.

A total of 11 field density tests were taken by the sand cone method to check the field compaction. The results of the field tests are given in Table 1. Field compaction was determined for the first four field density tests by using the relative density value. "One-point" compaction tests were used as a criterion for field density tests for the remainder of the project because of the variability of the fill; these tests utilized a 4-inch mold, a 10-lb hammer falling 18 inches, and 25 blows to each of five layers.

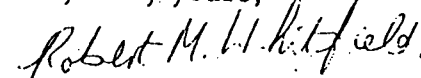
The field density tests indicate values somewhat lower than specified. However, this may be explained by the coarse and variable nature of the fill material which made testing of materials which were representative of the control test samples very difficult.

The next to the final lift adjacent to the existing building was not compacted before footing excavation work commenced; the general contractor and Mr. Leiner were advised of this. Perimeter areas and the office area were left about 1 1/2 ft below final subfloor grade at the time of our last inspection (24 Oct 1968) because of proposed excavation work in these areas. The unfinished fill work, which includes the upper 6 inches of subfloor fill (which we understand will be placed just before pouring of floor slabs), should be completed in the manner required in the specifications.

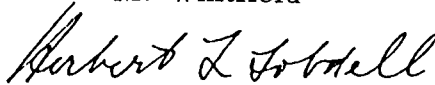
It is our opinion that the load-bearing fill completed between 3 October and 23 October 1968, while we were on the project, was constructed satisfactorily, and should provide suitable support for foundations. If the remainder of the subfloor fill is properly compacted and the material which is loosened by excavation work is properly recompacted, there should be suitable support for floor slabs.

If we can be of further service on this project, please call us.

Very truly yours,



Robert M. Whitfield



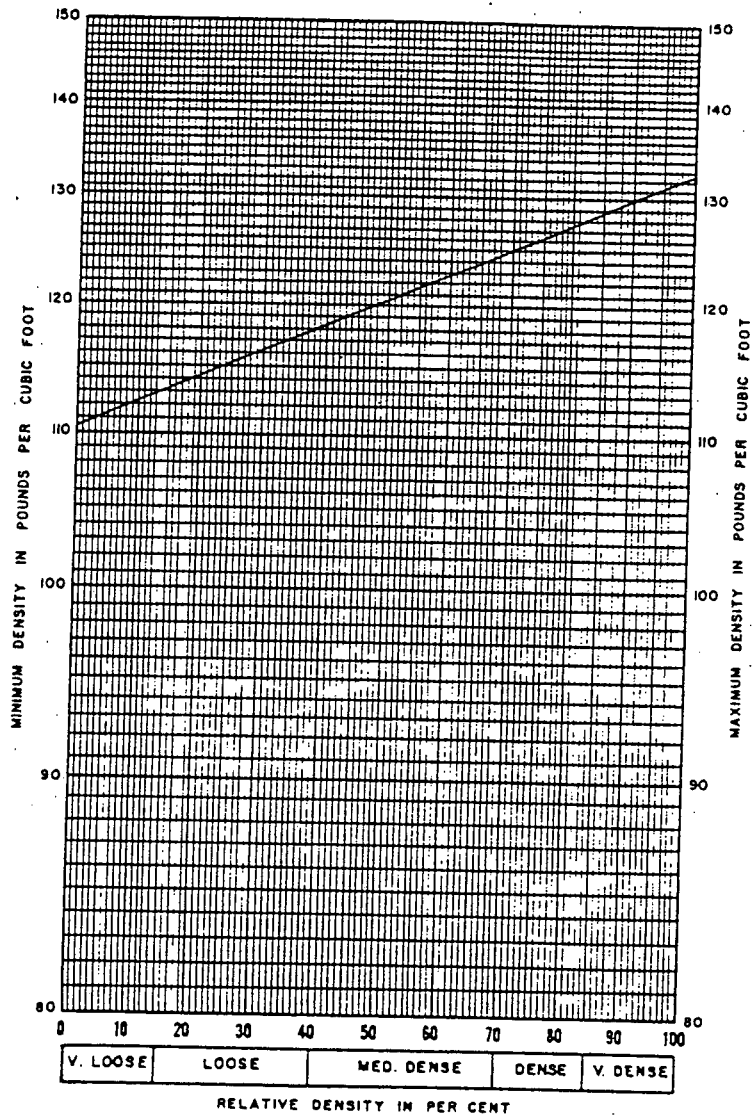
Herbert L. Lobdell, P. E.

RMW:esch

Submitted: 3 copies

Table 1
Results of Field Density Tests

<u>Date of Test</u>	<u>Field Dry Density (pcf)</u>	<u>Moisture Content (%)</u>	<u>Relative Density %</u>	<u>% Compaction</u>
10 Oct. 68	140.7	7.4	100 +	
11 Oct. 68	112.3	4.9	38	
14 Oct. 68	118.1	8.7	40	
16 Oct. 68	119.1	8.7		88.8
17 Oct. 68	114.1	5.4		93.4
17 Oct. 68	107.9	4.5		93.5
18 Oct. 68	105.8	8.8		86.4
21 Oct. 68	109.0	5.0		87.9
22 Oct. 68	110.9	6.1		83.9
24 Oct. 68	113.5	3.3		91.1



SAMPLE NO. _____ DEPTH _____

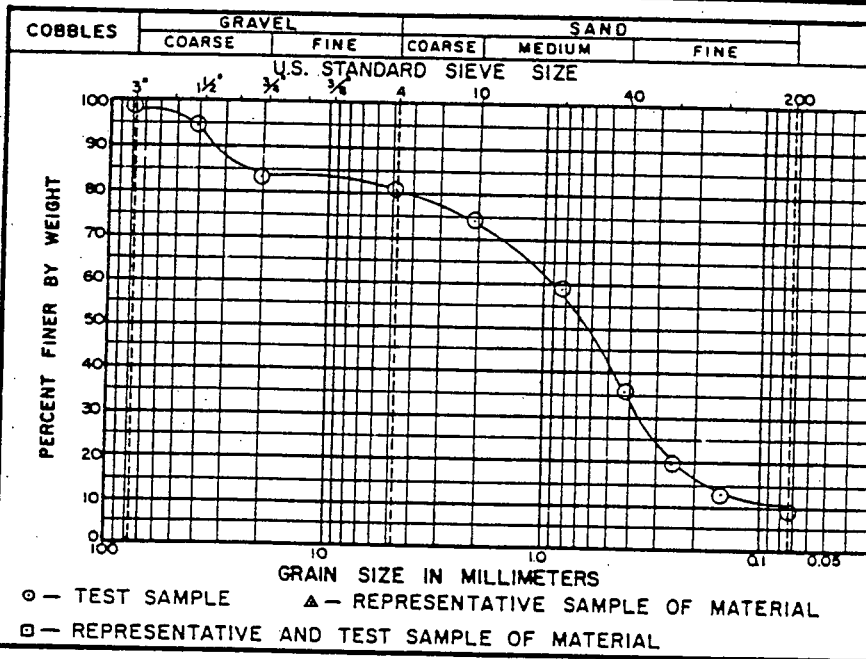
LOCATION Oakland Pit

MATERIAL Gravelly coarse to fine sand, trace silt

DESCRIPTION _____

TEST PROCEDURE: ASTM COMMITTEE D-18

SUGGESTED METHOD BY D.M. BURMISTER, 1964



MAXIMUM AND MINIMUM DENSITY TEST RESULTS AND GRAIN SIZE DISTRIBUTION CURVES

WOODWARD-CLYDE & ASSOCIATES
CONSULTING ENGINEERS AND GEOLOGISTS
CLIFTON, NEW JERSEY

CK'D. BY: _____

DATE: 10 Oct 1968

PROJ. NO: 68-286

FIG. NO: 1

OAKLAND, CALIFORNIA
SAN DIEGO, CALIFORNIA

DENVER, COLORADO
KANSAS CITY, MISSOURI
PHILADELPHIA, PENNSYLVANIA

OMAHA, NEBRASKA
NEW YORK, NEW YORK

WOODWARD-CLYDE-SHERARD AND ASSOCIATES
SOIL AND FOUNDATION ENGINEERING

PRINCIPALS
JAMES L. SHERARD
DOUGLAS C. MOORHOUSE
DAVID M. GREER

1425 BROAD STREET
CLIFTON, NEW JERSEY
TELEPHONE 471-2000

ASSOCIATE
ROY E. HUNT

October 18, 1963
63M158

U. S. Printing Ink Company
66 Industrial Avenue
Little Ferry, New Jersey

Attention: Mr. D. H. Seixas

Inspection of Excavation and Fill Operations

U. S. Printing Ink Company Site

East Rutherford, New Jersey

Gentlemen:

Submitted herewith is our report on the inspection of the excavation and placement of compacted fill at the subject site.

This work was done in accordance with our proposal of August 9, 1963, submitted to Bergen Engineering Company. Part way through the job however, we received notice from you and Bergen Engineering Company that your company would assume the position of client and that we would work directly for you.

Following the completion of excavation of unsuitable materials at the site, the bottom of excavation was inspected and approved by our field engineer. Fill was then placed in lifts and compacted by the passes of a vibratory roller (Vibro-Plus CK-40). Except for approximately one half of the first lift, the fill consists of a gravelly silty coarse to fine sand containing some cobbles and boulders, which was obtained from a pit in Wayne, New Jersey. The other material in the first lift was a trap rock of gravel, cobble, and boulder size which was obtained from a tunnel construction site.

Laboratory compaction test and sieve analysis were performed on the fill material to determine the compaction criterion in the field. Curves plotted from test results are attached to this report as Plates 1 and 2.

A total of 13 field density tests were made during the course of the

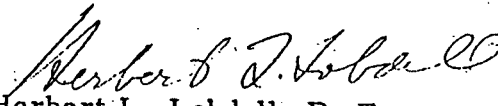
work to determine if satisfactory compaction was being achieved. The results of these field density tests are tabulated as Plate 3. At all places on the fill where the density was below 95% of Modified AASHTO maximum dry density, the layer was recompacted with additional passes of the roller.

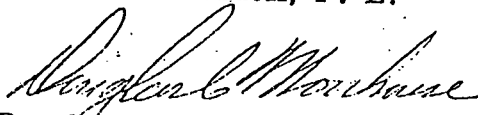
On the basis of our tests and observations, it is our opinion that the fill was placed and compacted satisfactorily and in accordance with the guide specifications attached to our soil and foundation report for the project.

A separate letter will be submitted at a later date on the pre-loading operation which is now in progress. Our settlement observations, which have been taken periodically, indicate the fill to date has settled between 0.2 and 0.3 feet.

Very truly yours,

WOODWARD-CLYDE-SHERARD & ASSOCIATES


Herbert L. Lobdell, P. E.


Douglas C. Moorhouse, P. E.

HLL:sd

5 copies submitted

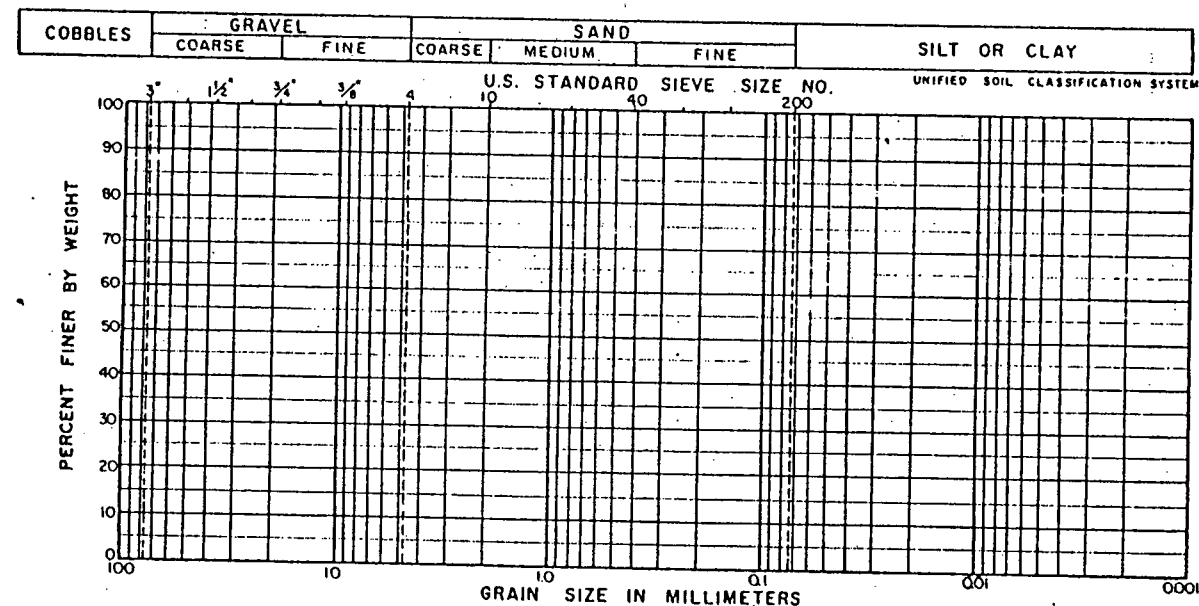
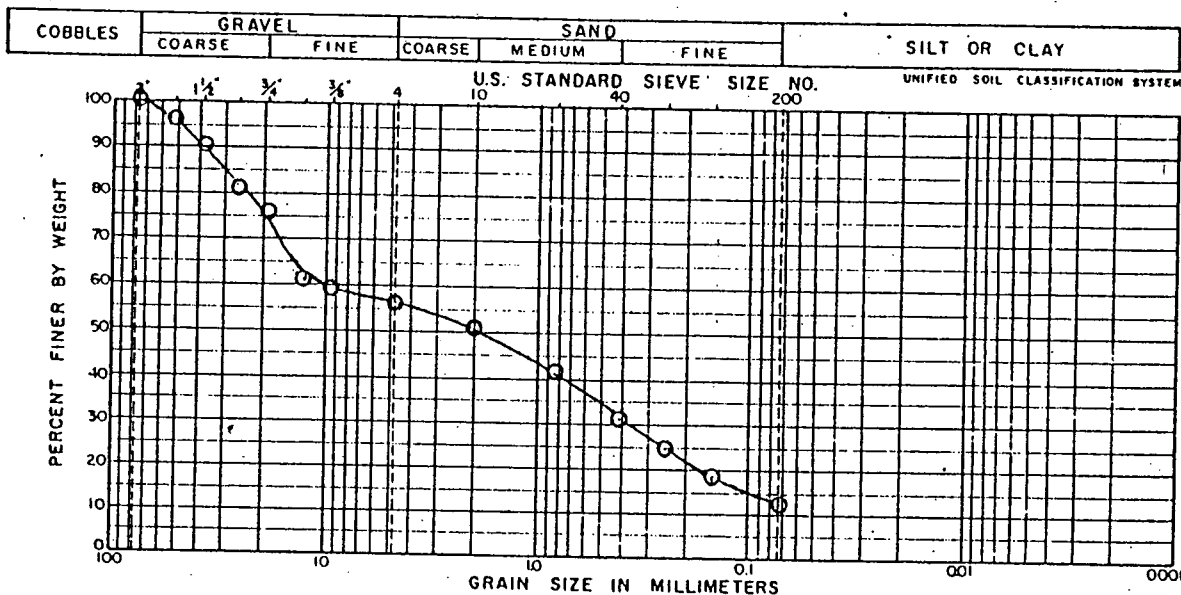
SUMMARY OF FIELD DENSITY TESTS

<u>Test No.</u>	<u>Date</u>	<u>Weight pcf</u>	<u>Content %</u>	<u>% Compaction</u>
1	9/9	125	9.4	90
2	9/10	109	8.0	*
3	9/11	127	8.5	92
4	9/12	129	8.6	93
5	9/13	129	10.9	93
6	9/15	125	9.8	90
7	9/16	130	10.7	94
8	9/16	128	10.6	93
9	9/17	134	7.3	97
10	9/17	133	9.3	96
11	9/18	139	8.8	100
12	9/18	136	10.6	98
13	9/19	128	6.8	93

* Material judged to be well compacted; laboratory compaction test (Plate 2) not applicable because material was fine sand.

PLATE 3

MECHANICAL ANALYSIS



MOISTURE vs. DENSITY

Material: Brown silty gravelly coarse to fine sand

Test Conditions: Modified AASHO (6 inch diameter mold)
using minus 3/4-inch sieve material

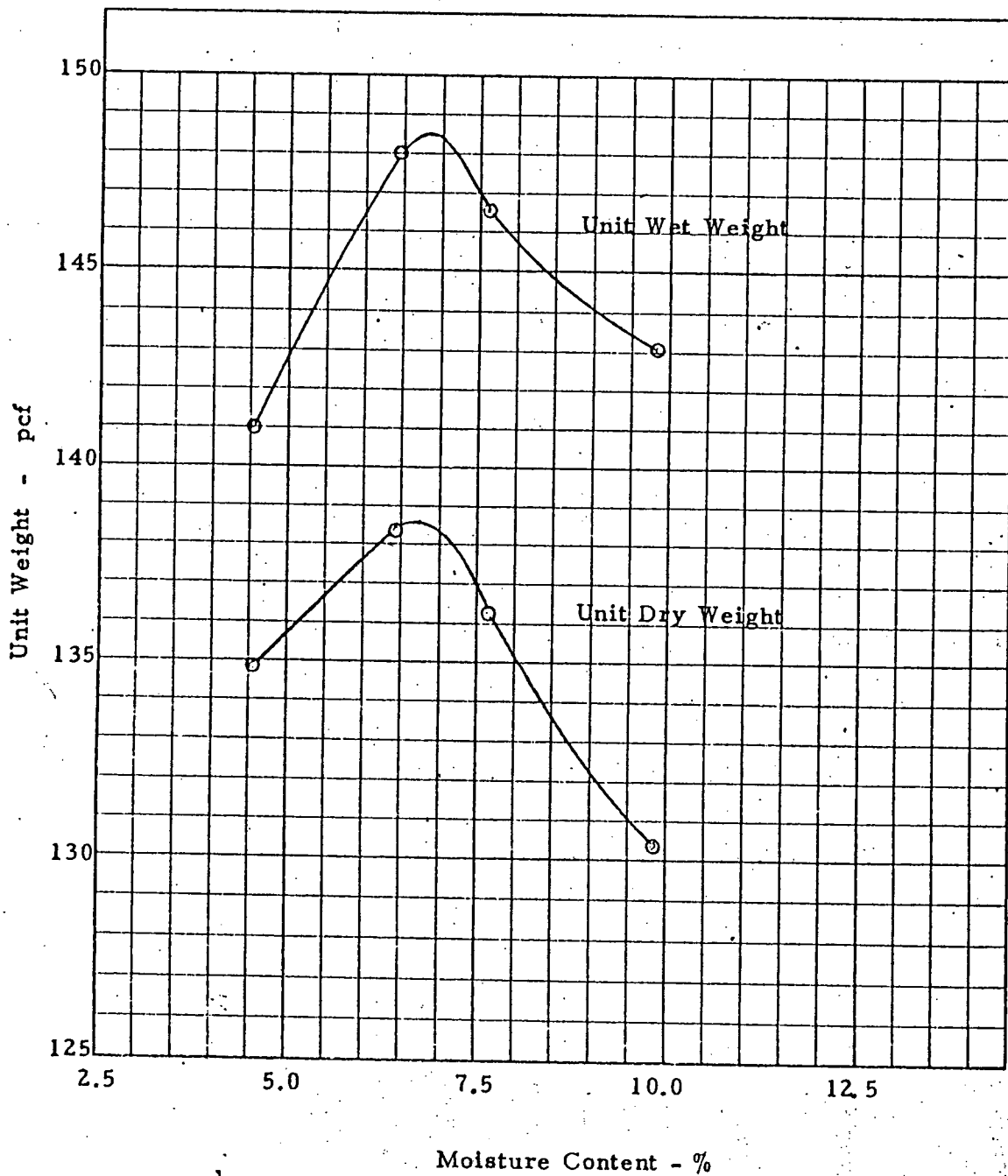


Exhibit D

ECRA Final Report of Soil Cleanup

**UNITED STATES PRINTING INK CORP.
EAST RUTHERFORD, NEW JERSEY
ECRA CASE #86834**

Prepared For:

**United States Printing Ink Corporation
343 Murray Hill Parkway
East Rutherford, New Jersey**

Prepared By:

**McLaren/Hart Environmental Corporation
25 Independence Boulevard
Warren, New Jersey 07059**

August 1993

KERBY, COOPER, ENGLISH, DANIS & GARVIN
COUNSELLORS AT LAW

RUSSELL T. KERBY, JR.
JOHN W. COOPER
JERRY FITZGERALD, ENGLISH
ARTHUR H. GARVIN III
DARY F. DANIS, P.E.

RONALD J. TELL
STEVEN S. GOLDENBERG
OF COUNSEL

RICHARD G. MOSER
1940-1992

480 MORRIS AVENUE
SUMMIT, NEW JERSEY 07901-1583

908-273-1212

FAX 908-273-8922

FRED L. PEARLUTTER
KRISTEYER BRACC
STEPHEN R. GELLER
PETER W. GILSON
DONNA M. RUSSO
DANIEL JON KLEINMAN
HOLLY ENGLISH
MARGARET R. KALAS
MARY T. ZDANOWICZ
ROBERT A. MEYER
RICHARD F. DELANEY

ALSO ADMITTED IN NY
ALSO ADMITTED IN DC
ALSO ADMITTED IN PA
ALSO ADMITTED IN VA

William J. Hadsell, Jr., Case Manager
New Jersey Department of
Environmental Protection & Energy
Division of Responsible Party
Site Remediation

CN 028
Trenton, NJ 08625-0028

July 30, 1993

RE: United States Printing, Ink.
ISRA Case # 86834--ECRA Final Report of Soil Cleanup,
Dated July, 1993.

Dear Mr. Hadsell,

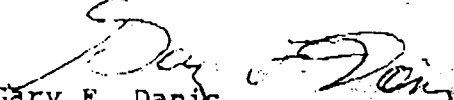
Enclosed please find the subject report. This report is complete in all respects except that it does not contain information on soil disposal. The soils on site, including the soil from the replacement of MW-2, have been approved for disposal by two recycling facilities. As soon as the soils are actually shipped off-site, we will forward this documentation.

As we previously discussed by telephone and as shown in the last progress report schedule, the groundwater report will be submitted at a later date.

Millmaster is most anxious to resolve as many issues as possible, so that the case can be closed. Therefore, it requests that the Department review the soils report now so that any questions can be resolved at this time, rather than waiting until the groundwater report is issued. We believe that all of the Department's requirements have been met by the enclosed report as to soil issues. Therefore, if the Department agrees, Millmaster would like a No Further Action letter issued covering the soils remediation. If however, the Department has questions, please let me know as soon as possible so that we can resolve them now. Millmaster believes that by following this approach, the entire case will be in a position to be immediately closed when the final monitoring data is submitted for MW-2.

Thank you for your cooperation in this matter.

Very truly yours,


Gary F. Danks

GFD:gsg

cc: D. Sadlowski
L. Lepore
G. Andrzejewski

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1.0 INTRODUCTION

McLaren/Hart Environmental Engineering Corporation (McLaren/Hart) of Warren, New Jersey has prepared the enclosed ECRA Final Report for the United States Printing Ink (USPI) facility located in East Rutherford, New Jersey on behalf of USPI in accordance with the requirements of the Cleanup Plan Approval Letter dated May 14, 1992 (Appendix A) and the New Jersey Environmental Cleanup Responsibility Act (ECRA).

1.1 SITE DESCRIPTION AND LOCATION

The manufacturing and office building at USPI covers an area of 53,840 square feet. The site is shown on Figure 1-1, Site Location Map. Approximately 50,048 square feet of the facility is covered by macadam parking lots and 15,200 square feet is covered with crushed gravel (railroad unloading area and backyard storage area). The southern portion of the plant is bounded by a railroad spur which extends east-west and ends at Murray Hill Parkway. A drainage ditch is located adjacent to (and roughly parallel to) the back portion of the railroad spur. Murray Hill Parkway bounds the facility on the east side and Whelan Avenue bounds the facility on the northern side. A general site map including the areas of environmental concern is provided in Figure 1-2.

1.2 SITE HISTORY

On November 10, 1965, United States Printing Ink Corporation purchased an undeveloped tract of land for the production of web off-set and letter press inks. Operations at USPI began in 1967 after the construction of offices and a manufacturing building at the East Rutherford site.

In 1968, USPI was bought by Millmaster Onyx Corporation which was subsequently purchased by Kewanee Industries in 1976. Kewanee Industries was acquired by Gulf Oil Corporation in 1977. On December 22, 1982, Millmaster Onyx Group, Inc. acquired the USPI facility from

Gulf Oil Corporation. During all changes in ownership, operations remained unchanged at the USPI facility.

USPI is a manufacturer of printing inks used primarily for the newspaper industry.

Raw materials used prior to 1982 in the manufacturing of the printing inks included: naphthnic mineral oils, Michlers ketone and shellac.

1.3 PREVIOUS INVESTIGATIONS

The Phase I Sampling Plan investigation was conducted April 17 through April 19, 1989. This field investigation consisted of sampling soils and drainage ditch sediments to evaluate potential contamination on-site. Based on these analytical results, two general areas of environmental concern (AECs) were identified: the gravel covered backyard and the trailer loading area/transformer area. The results of this initial investigation are contained in the Hart Environmental Management Corporation (HART) June 1989 report.

The Phase II Supplemental Sampling Plan (SSP) investigation was conducted at the USPI facility from April 9 through April 13, 1990. This phase of the investigation included additional soil sampling and installation and sampling of six shallow groundwater monitoring wells. The goal of the SSP was to further define the vertical and horizontal extent of potential contamination in soils and groundwater at the USPI facility. Delineation activities focused on six detailed AECs: Area A (transformer area and east trailer loading area); Area B (gravel and soil covered backyards; hazardous waste storage area, dumpster, waste tanks, and compactor); Area #3 (railroad area); Area #4 (drainage ditch); Area #5 (front lawn area); and Area #6 (west parking lot). Results of the Phase II Supplemental Sampling Plan are contained in the HART July 1990 report.

A Phase III Supplemental Sampling program was initiated on February 11, 1991. Soil sampling was conducted in accordance with the requirements set forth in the NJDEPE Partial Soils Cleanup Approval letter dated December 17, 1990. NJDEPE requirements for further

delineation included additional soil sampling in Area #1 (transformer area), Area #2 (gravel covered backyard), and Area #4 (drainage ditch) and a supplemental round of groundwater sampling. Results of the Phase III investigation are discussed in the McLaren/Hart October 1991 Supplemental Sampling Plan Results Report. A summary of the correspondence and submittals are provided in Table 1-1. Figure 1-3 shows the areas requiring soil remediation.

1.4 FINAL REMEDIATION REPORT SUMMARY

This Final Remediation Report is divided into several major sections, which are identified below:

- Site Characteristics (Section 2.0) describes the geologic conditions at the Site.
- Summary of Remediation Activities (Section 3.0) summarizes the actions taken in the specified AECs. This section also includes the results of the post-excavation sampling which was conducted in the remediated areas.
- Waste Management (Section 4.0) describes the sampling and analyses which was conducted on the soils and washwaters generated during remediation activities.
- Remediation Costs (Section 5.0) describes the costs associated with the remediation activities described in Section 3.0.

2.0 SITE CHARACTERISTICS

2.1 SITE SOILS AND GEOLOGY

2.1.1 Regional Geology

The USPI facility is underlain by reddish brown shales and fine-grained sandstones of the Late-Triassic Passaic Formation. Overlying the Passaic are glacial tills comprised of reddish brown sandstone and shale clasts of clays, silts, and sands of variable grain sizes. Overlying the glacial tills are lacustrine derived varved clays, interspersed with alluvial deposits of sand and silt. As the sea level rose, estuarine conditions extended into the valley encompassing the facility which resulted in the deposition of a highly organic silt and clay layer called "meadow mat". Overlying the meadow mat is a layer of fill which varies in thickness throughout the site.

2.1.2 Site Geology

Site specific data obtained during monitoring well installations indicate that the surface soils at the site are comprised primarily of sand and gravel fill. Fill at the site ranges in thickness from 4 feet at MW-2 to greater than 13 feet at MW-4. This material is directly underlain by a 1 to 4 foot thick layer of meadow mat. No meadow mat or clay layer was encountered at location MW-4. The meadow mat is underlain by a grey silty clay which is encountered between 8 to greater than 13 feet below grade.

3.0 SUMMARY OF REMEDIATION ACTIVITIES

The ECRA Cleanup Plan (October 1991) and subsequent addendums (November 1991 and February 1992) discussed in detail the sampling results for the site and proposed remedial action for three of the nine AECs: Transformer Area, Railroad Area and Drainage Ditch Area. The NJDEPE conditionally approved the proposed Cleanup Plan in a letter dated May 14, 1992. This conditional approval letter required additional tasks to be completed at three other areas at the facility: the Soil Covered Backyard, the Gravel Covered Backyard and the Concrete Portion of the Railroad Area. Remediation for the Soil Covered Backyard and the Concrete Portion of the Railroad Track Area were required as a result of visual observations made during the NJDEPE site inspection on February 17, 1992. Further sampling was required in the Gravel Covered Backyard Area to demonstrate that the area was properly classified as requiring no further action.

To summarize, the NJDEPE required the following issues to be addressed as part of the conditionally approved Cleanup Plan:

- Soil excavation in the vicinity of soil boring BC-57 in the Transformer Area (Area A - Area #1) to the water table. Analyses of post-excavation samples for Petroleum Hydrocarbons (PHCs) would be performed;
- Excavation of visibly stained surficial soils in the Soil Covered Backyard Area to a depth of 12". Post-excavation samples collected from this area would be analyzed for PHCs, base neutrals (BN + 15) and volatile organics (VO + 15);
- Additional sampling at soil boring B-9 in the Gravel Covered Backyard Area. This sample would be analyzed for benzene, toluene, ethylbenzene and xylene (BTEX);

- Further delineation sampling and subsequent soil excavation in the Railroad Area (Area #3) to a depth of 24" and post-excavation sampling for PHCs and BN + 15;
- Excavation of soils in the drainage ditch and in two localized areas in the Drainage Ditch Area. Post-excavation samples from the drainage ditch would be sampled for PHCs. Post-excavation samples from the area of soil borings S-9 and S-11 would be analyzed for lead (Pb) and zinc (Zn).
- The concrete portion of the Railroad Area would be power washed to remove staining.

This section discusses in detail the performance of the above listed remedial actions performed at the Site to comply with the NJDEPE conditional cleanup approval. Table 3-8 presents a summary of all remediation activities conducted.

3.1 AREA A: TRANSFORMER AREA (AREA #1)

The Transformer Area is located along the southeastern corner of the USPI property, immediately south of the terminus of the railroad tracks. The Cleanup Plan proposed excavation in the vicinity of soil boring BC-57 due to PHC concentrations detected in excess of the proposed NJDEPE cleanup level.

3.1.1 Remedial Action (Transformer Area)

Excavation of the Transformer Area was conducted on January 5, 1993 by McLaren/Hart. Figure 3-1 shows the areal extent of the soil remediated. The location of soil boring BC-57 is shown in Figure 1-2. The Transformer Area was excavated down to the water table (approximately 1 foot below grade). It is estimated that a total of 1 cubic yard of soil was removed from the excavation. The removed soil was staged on-site on plastic sheeting and was

covered by plastic sheeting. Upon completion of the remedial activities at the site, the soil was sampled for waste classification and disposal, as described further in Section 4. After the post-excavation sampling, described below, the excavation was backfilled to the original grade with clean fill.

3.1.2 Post-Excavation Sampling Results (Transformer Area)

A total of four samples, including one duplicate, were collected from the Transformer Area excavation, as shown on Figure 3-1. Each of the samples was collected from the sidewall of the excavation at a depth of one foot. No sample was collected from the fourth sidewall since this side of the excavation was bordered by a retaining wall which extended into the water table. The samples were analyzed for PHCs. The results are presented in Table 3-1. The post-excavation samples confirm that the concentrations of PHCs in the remaining soils are below the proposed NJDEPE cleanup levels, as specified in the conditional Cleanup Approval letter.

3.2 AREA B: SOIL AND GRAVEL COVERED BACKYARD (AREA #2)

3.2.1 Additional Sampling (Gravel Covered Backyard)

Soil sampling in the Gravel Covered Backyard (Area 2) was completed in July 1992 to comply with the NJDEPE requirement for re-sampling location B-9 for the purposes of vertical delineation. The location of B-9 is shown on Figure 1-2. Sample BD-1 and duplicate BD-21 were collected at a depth of 18-24" below grade. These samples were analyzed for BTEX in accordance with the conditional Cleanup Approval letter of May 1992.

The analytical results from this sampling were received in August 1992 and an internal Quality Assurance/Quality Control (QA/QC) review was conducted on the complete results reports. These results were presented as Attachment I to the September Monthly Progress Report. Analytical results for samples collected in the Gravel Covered Backyard Area were below the

proposed cleanup levels for benzene, toluene, ethylbenzene and total xylenes; therefore, no remediation was conducted in this area.

3.2.2 Remedial Action (Soil Covered Backyard)

During the facility inspection by the NJDEPE on February 17, 1992, several areas of surface staining were noted in the Soil Covered Backyard Area. The conditional Cleanup Approval letter required sampling of these areas for PHCs, BN+15 and VO+15 to determine if any of the proposed cleanup levels were exceeded. If an exceedance was found, the soil was to be remediated. It was determined to be more efficient to excavate the surface stained areas and then conduct post-excavation sampling of the remaining soils in these areas since the total quantity of soil involved in the surficial staining was limited.

Two locations in the Soil Covered Backyard Area were excavated to a depth of one foot, resulting in a total of approximately 2 cubic yards of soil removed from the area. These soils were transferred to the soil staging area, placed on plastic and covered with plastic sheeting. The soils were included in the waste classification described below in Section 4. After the post-excavation sampling described below, each of the locations was backfilled to grade.

3.2.3 Post-Excavation Sampling Results (Soil Covered Backyard)

A total of nine (9) samples, including one duplicate, were collected from the Soil Covered Backyard Area excavations, four (4) from one excavation (Stain 1) and five (5) from the other stained area (Stain 2). The approximate areal extent of each surface stain and the sample locations are shown on Figure 3-2. Each of the samples was collected from the sidewalls of the excavation at a depth of six inches to one foot. The samples were analyzed for PHCs, BN +15, and VO +15. The analytical results are presented in Table 3-3A and Table 3-3B. The post-excavation samples confirm that the concentration of PHCs and VOs are below the proposed NJDEPE cleanup levels, as specified in the conditional Cleanup Approval letter. Although one sample (SS2-2) contained an elevated concentration of benzo(a)pyrene, the average concentration

of benzo(a)pyrene detected in post-excavation samples collected in the Stain 2 area is below the NJDEPE cleanup level.

3.3 AREA #3: RAILROAD AREA

3.3.1 Additional Sampling (Railroad Area)

3.3.1.1 Delineation Sampling - In order to fully delineate the area along the railroad tracks to be remediated, USPI conducted additional delineation sampling in July 1992. This sampling effort was developed to address the sampling/analytical issues raised by the NJDEPE in the conditional Cleanup Approval letter of May 1992. These sample locations are shown in Figure 3-3.

The results from this sampling program were received in August 1992 and a quality assurance/quality control (QA/QC) review was conducted on the data reports. The results were submitted to the NJDEPE in the monthly progress report for September 1992. Based upon the detected concentrations, it was determined that the limits of the Railroad Area excavation would extend a total length of 140 feet along the building and a width of 20 feet, as shown in Figure 3-4.

3.3.1.2 BD-2 Results - Soil sample BD-2 and its duplicate BD-22 were originally collected in July 1992 at the west end of the railroad track area as part of the delineation effort. Due to matrix interference, the results received in August 1992 contained elevated detection limits for BNs. This location was resampled in July 1993, pursuant to the NJDEPE letter dated March 2, 1993. As approved in the March 2, 1993 NJDEPE correspondence, this sample was analyzed for polycyclic aromatic hydrocarbons using an HPLC method (Method 8310). Table 3-2B presents the demonstration that the polycyclic aromatic hydrocarbons are below the NJDEPE required levels. These results combined with the results of post-excavation sample RR-1, discussed below, demonstrate that a clean zone has been documented for the Railroad Track Area.

3.3.2. Remedial Action (Railroad Area)

Prior to the remediation of this area, Railroad Construction Inc. was contracted by USPI to remove the section of the railroad spur which extends parallel to the side of the USPI building overlying the soil which was to be excavated. This track removal work was conducted on December 29, 1992. Excavation of the Railroad Area was then conducted on January 4 and 5, 1993 by McLaren/Hart. Figure 3-3 shows the areal extent of the soil remediated. The Railroad Track area was excavated to a depth of two feet. It is estimated that a total of 208 cubic yards of soil were removed from the excavation. The removed soil was transported back to the staging area, placed on plastic sheeting and covered by plastic sheeting. Upon completion of the remedial activities at the site, the soil was sampled for waste classification and disposal, as described further in Section 4. Post-excavation sampling was conducted along the excavation as described below.

On January 8, the backfilling of the excavation for the Railroad Area was initiated. The first load (approximately 19 cubic yards) of what was supposed to be 4 inch base stone was dumped into the excavation only to have it discovered that the stone had been mixed with hot asphalt. The stone/asphalt mix was immediately removed from the excavation and staged on the adjacent concrete pad. The NJDEPE ECRA Case Manager was contacted and the backfilling error was explained. Since asphalt is not considered a hazardous waste and all of the asphalt had been removed immediately along with any adjoining soils, the NJDEPE representative agreed to allow the remediation to proceed. The asphalt/stone mixture was picked up by the contractor which had originally delivered it and returned to the quarry for reworking. The excavation was then backfilled to grade with 4 inch base stone.

3.3.3 Post-Excavation Sampling Results (Railroad Area)

A total of 10 samples, including one duplicate, were collected from the Railroad Area excavation, as shown on Figure 3-4. Each of the samples was collected from the sidewall of the excavation at a depth of approximately one foot. The samples were analyzed for petroleum hydrocarbons (PHCs) and BNs.

Due to matrix interference from the PHCs in previous samples collected from this area, there was a concern that the BN detection limits for some carcinogenic polynuclear aromatic hydrocarbons (CaPAHs) might exceed the proposed NJDEPE cleanup standards for the compounds. Therefore, one quarter of the post-excavation samples were sent to the laboratory for HPLC analysis in case the gas chromatograph (gc) method showed a matrix interference problem. The post-excavation samples were sufficiently free from matrix interference to achieve the required minimum detection limits by gc. The results are presented in Table 3-4. The post-excavation samples confirm that the reported concentrations of BNs are below the approved NJDEPE cleanup levels, as specified in the approval letter.

3.4 AREA #4: DRAINAGE DITCH

The Drainage Ditch is located along the southern side of the USPI property. There were three specific locations in the Drainage Ditch Area which were to be remediated in accordance with the Cleanup Approval letter issued by the NJDEPE. The first area was a section of the bottom of the drainage ditch where elevated concentrations of PHCs were detected. The second and third spots to be excavated were localized areas of elevated metals concentrations in the vicinity of soil borings S-9 and S-11, respectively. These locations are shown in Figure 1-2.

3.4.1 Remedial Action (Drainage Ditch)

Soil remediation activities in the Drainage Ditch Area were conducted by McLaren/Hart on January 5, 1993. The locations of the three excavations are shown on Figure 3-5. The drainage ditch had a total of 11 cubic yards of sediment removed from the bottom of the ditch. A total

of 1 cubic yard of soil was removed from the area around former boring location S-11 where soils were excavated to the water table (a depth of approximately one foot).

The excavation of soil around former boring location S-9 was also conducted to the depth of the water table. A visible sheen was observed on the water table; therefore, the area of excavation was extended, with a total of 2 cubic yards of soil removed from this location. Oil adsorbent booms were used to remove the sheen from the standing water in the excavation and the excavation was allowed to remain open for a 24 hour period. Subsequently, the water in the excavation was reinspected and no visible sheen was noted. The post-excavation samples collected from the sidewalls in this area were also analyzed for PHCs, as discussed below.

3.4.2 Post-Excavation Sampling Results (Drainage Ditch)

A total of 7 samples, including one duplicate, were collected from the soils at the bottom of the drainage ditch. Due to the winter conditions and unstable soil/ice on the drainage ditch banks, these samples were collected from soils removed by backhoe after soil remediation of the area had been completed. The results of the analyses of these samples are provided in Table 3-5. These results show that all samples contained concentrations of PHCs below the proposed cleanup levels specified by the NJDEPE in the Cleanup Approval Letter of May 1992. The soil samples collected from the hotspot areas were also sampled and analyzed for PHCs. The analytical results from this sampling, which show that there were no exceedances of the NJDEPE specified cleanup level, are included in Appendix 1.

A total of nine samples, including one duplicate were collected from the sidewalls of the excavations in the vicinity of boring locations S-11 and S-9. Figure 3-6 shows the results of all samples taken in the Drainage Ditch Area of Concern, including the post-excavation samples. As shown in Table 3-6, using the three NJDEPE criteria (proposed regulations) for evaluating these data, each area is found to be within the compliance criteria. Therefore, no further action is proposed for this area.

3.5 CONCRETE PORTION OF RAILROAD TRACK AREA

The conditional Cleanup Approval letter issued by the NJDEPE in May 1992 required that USPI conduct cleaning of the concrete portion of the Railroad Track Area "to prevent soil recontamination from water runoff". The concrete portion of the loading dock, which has drainage spouts which empty onto the railroad track area, was power washed on December 30, 1992. This work was conducted prior to the remediation of the Railroad Track Area.

4.0 WASTE MANAGEMENT

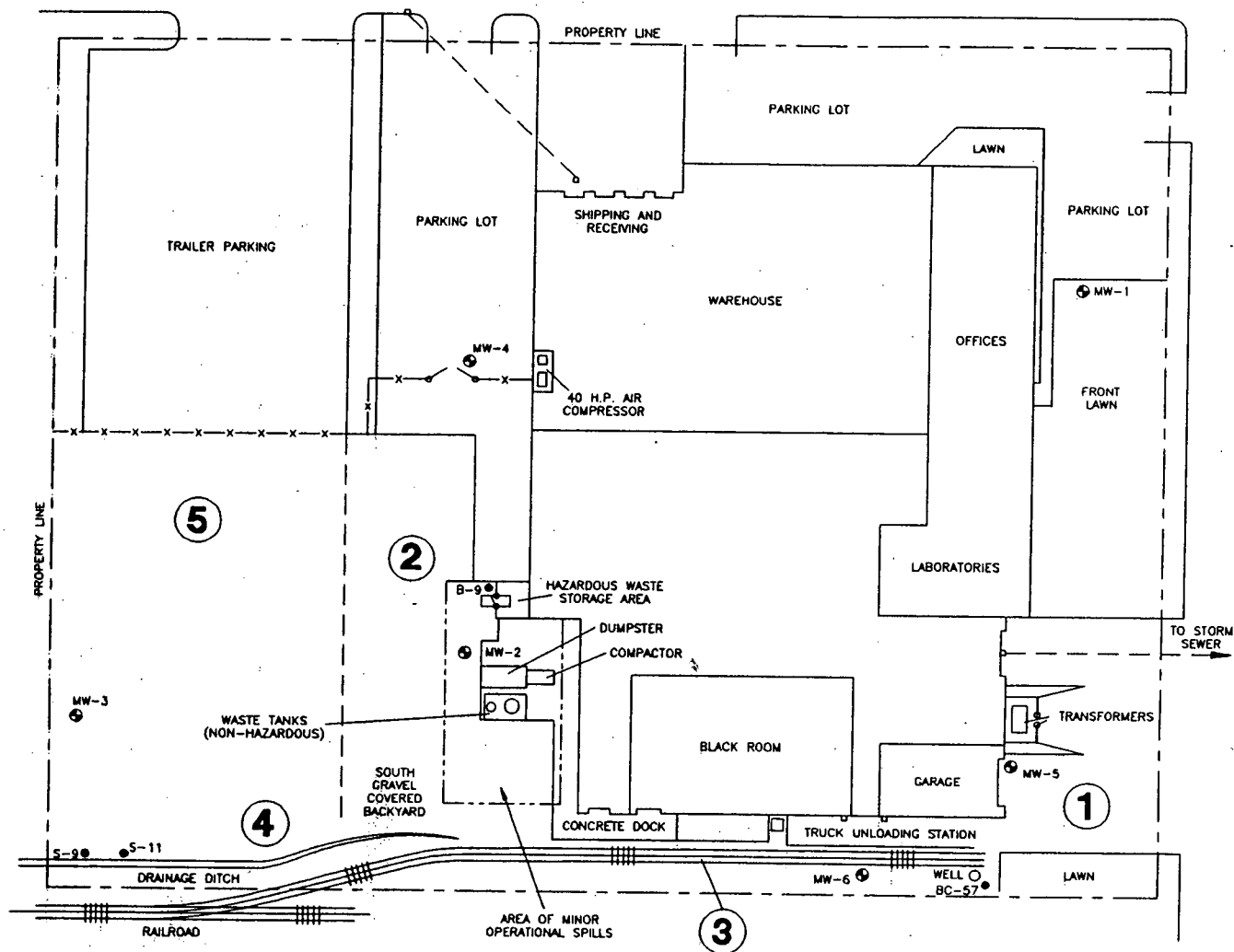
As discussed previously, waste characterization samples were collected from the excavated stockpiled soil. Four samples (composite) were collected from the combined 400 cubic yards of excavated soils. The sample analyzed by Lancaster Laboratory, a New Jersey Certified Laboratory, for a full TCLP scan. Based upon these results and the origin of the soils, the excavated soils were classified as a nonhazardous waste.

Several recycling facilities were contacted with the waste characterization results and responded that the soils could be treated in their facility. An additional soil sample was submitted to the laboratory for BTEX, PCB, flashpoint, percent (%) moisture, TOX, TPH, and paint filter tests to satisfy recycling analytical requirements. Upon selection of the recycling facility, a request will be made to the NJDEPE for a waste flow exemption for these soils. Receipt of this exemption will allow shipment of the soil within a three week period.

All pertinent paper work concerning the shipment and recycling of these soils will be submitted to the NJDEPE upon completion of the shipments.

5.0 REMEDIAL ACTION COSTS

A summary of the work completed during the remediation of the USPI facility is presented in Table 3-4. The total costs for completing the above described remediation work is \$ 200,000.



- AREAS OF ENVIRONMENTAL CONCERN**
- ① TRANSFORMER AREA
 - ② GRAVEL COVERED BACKYARD
 - ③ RAILROAD TRACK AREA
 - ④ DRAINAGE DITCH
 - ⑤ SOIL COVERED BACKYARD

LEGEND

- ⊙ MONITORING WELL
- B-9 • BORING SAMPLE

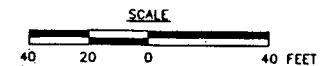


FIGURE 1-2

GENERAL SITE PLAN INCLUDING
AREAS OF ENVIRONMENTAL CONCERN

UNITED STATES PRINTING INK CORPORATION
EAST RUTHERFORD, NEW JERSEY



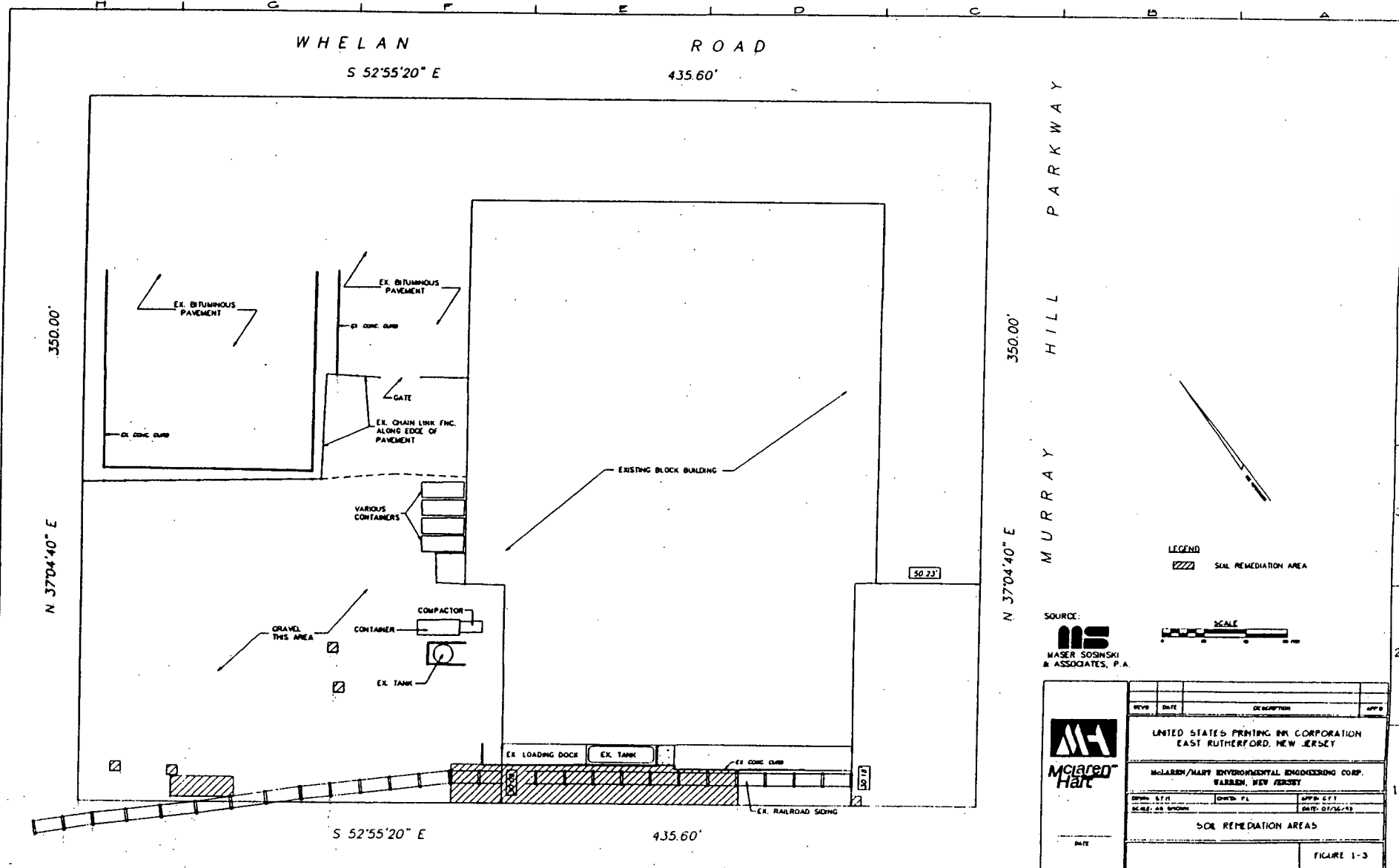
McLAREN/HART
ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: S.F.H./B.R.F.

CHK'D: P.L.

SCALE: AS SHOWN

DATE: 08/02/93



REV	DATE	DESCRIPTION	APP'D
UNITED STATES PRINTING IN CORPORATION EAST RUTHERFORD, NEW JERSEY			
McLAREN/HART ENVIRONMENTAL ENGINEERING CORP. WARREN, NEW JERSEY			
DESIGN: STN	DRAWN: PL	APP'D: C.T.	
SCALE: AS SHOWN	DATE: 07/26/93		
SOIL REMEDIATION AREAS			
DATE			FIGURE 1-3



Garage

Driveway

Railroad Tracks

Grass Area

Transformer-4

Transformer-2

Retaining Wall

Transformer 1, and 3 (duplicate)

Scale: 1" = 5'

KEY

◆ Transformer-1 POST-EXCAVATION
SAMPLE LOCATION



AREA OF REMEDIATION

FIGURE 3-1

AREA A: TRANSFORMER AREA

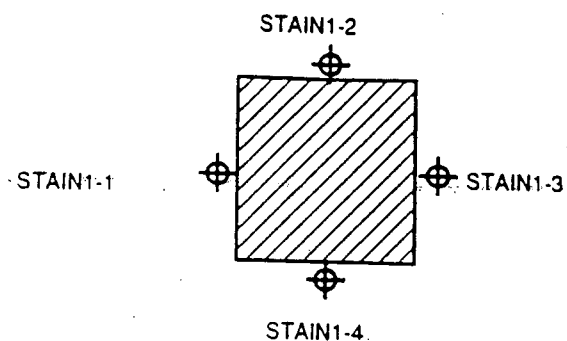
United States Printing Ink Corporation
East Rutherford, New Jersey
ECRA Case # 86834

DRWN BY: KVO

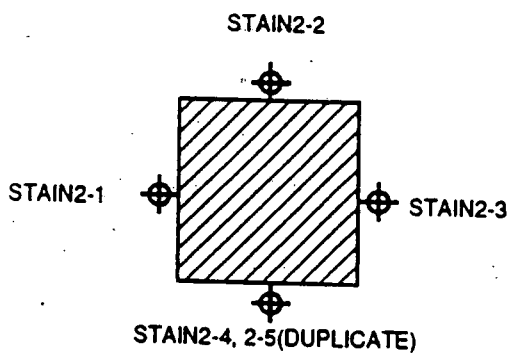
DATE: 3/26/93



**McLaren
Hart**



Stain 2 is 84' west of building wall
and 48' north of building corner



Stain 1 is 81' west of building wall
and 30' north of building corner

Scale: 1" = 5'

KEY

✦ Stain1-1 POST-EXCAVATION
SAMPLE LOCATION



AREA OF REMEDIATION

FIGURE 3-2

AREA B: SOIL AND GRAVEL COVERED BACKYARD

United States Printing Ink Corporation
East Rutherford, New Jersey
ECRA Case # 86834

DRWN BY: KVO

DATE: 3/26/93



**McLaren
Hart**

DEPTH	TBN	TPHC
1-1.5'	ND	3,100
1-1.5'	ND	5,400

BD2
BD22

CONCRETE DOCK

TRUCK UNLOADING STATION

BD8

DEPTH	TBN	TPHC
1-1.5'	ND	ND

DEPTH	TBN	TPHC
1-1.5'	ND	ND

MW-6

PROPERTY LINE

LEGEND



MONITORING WELL



DELINEATION SAMPLE LOCATION

TPHC

TOTAL PETROLEUM HYDROCARBONS

TBN

TARGETED BASE NEUTRALS

ND

NOT DETECTED

NOTE: ALL SAMPLE CONCENTRATIONS ARE
MEASURED IN PARTS PER MILLION (ppm)

SCALE

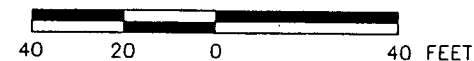


FIGURE 3-3

DELINEATION SAMPLE LOCATIONS
RAILROAD TRACK AREA

UNITED STATES PRINTING INK CORPORATION
EAST RUTHERFORD, NEW JERSEY



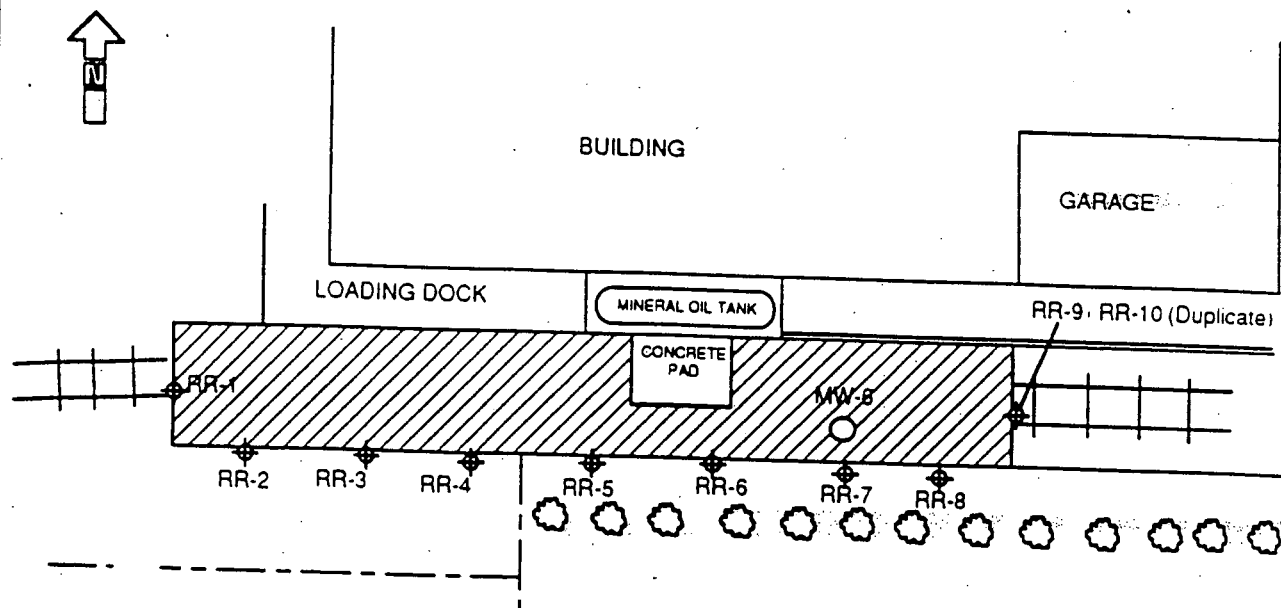
McLAREN/HART
ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: S.F.H./B.R.F.

CHK'D: P.L.

JOB#: 12-0800387-01G

DATE: 08/02/93



Scale: 1" = 30'

KEY

◆ RR-1 POST-EXCAVATION
SAMPLE LOCATION

▨ AREA OF REMEDIATION

FIGURE 3-4

AREA #3: RAILROAD TRACK AREA

United States Printing Ink Corporation
East Rutherford, New Jersey
ECRA Case # 86834

DRWN BY: KVO

DATE: 3/26/93

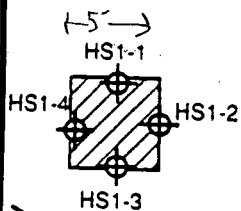


**McLaren
Hart**

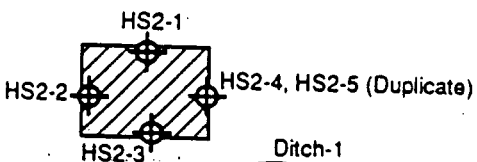


Soil Covered Backyard

Ditch Hot Spot 1



Ditch Hot Spot 2



Drainage Ditch

Ditch-3

Ditch-1

Ditch-2

Drainage Ditch

Ditch-4

Ditch-5

Ditch-6, Ditch-7(Duplicate)

Scale: 1" = 10'

KEY

⊕ Ditch-1 POST-EXCAVATION
SAMPLE LOCATION



AREA OF REMEDIATION

FIGURE 3-5

AREA #4: DRAINAGE DITCH

United States Printing Ink Corporation
East Rutherford, New Jersey
ECRA Case # 86834

DRWN BY: KVO

DATE: 3/26/93



**McLaren
Hart**

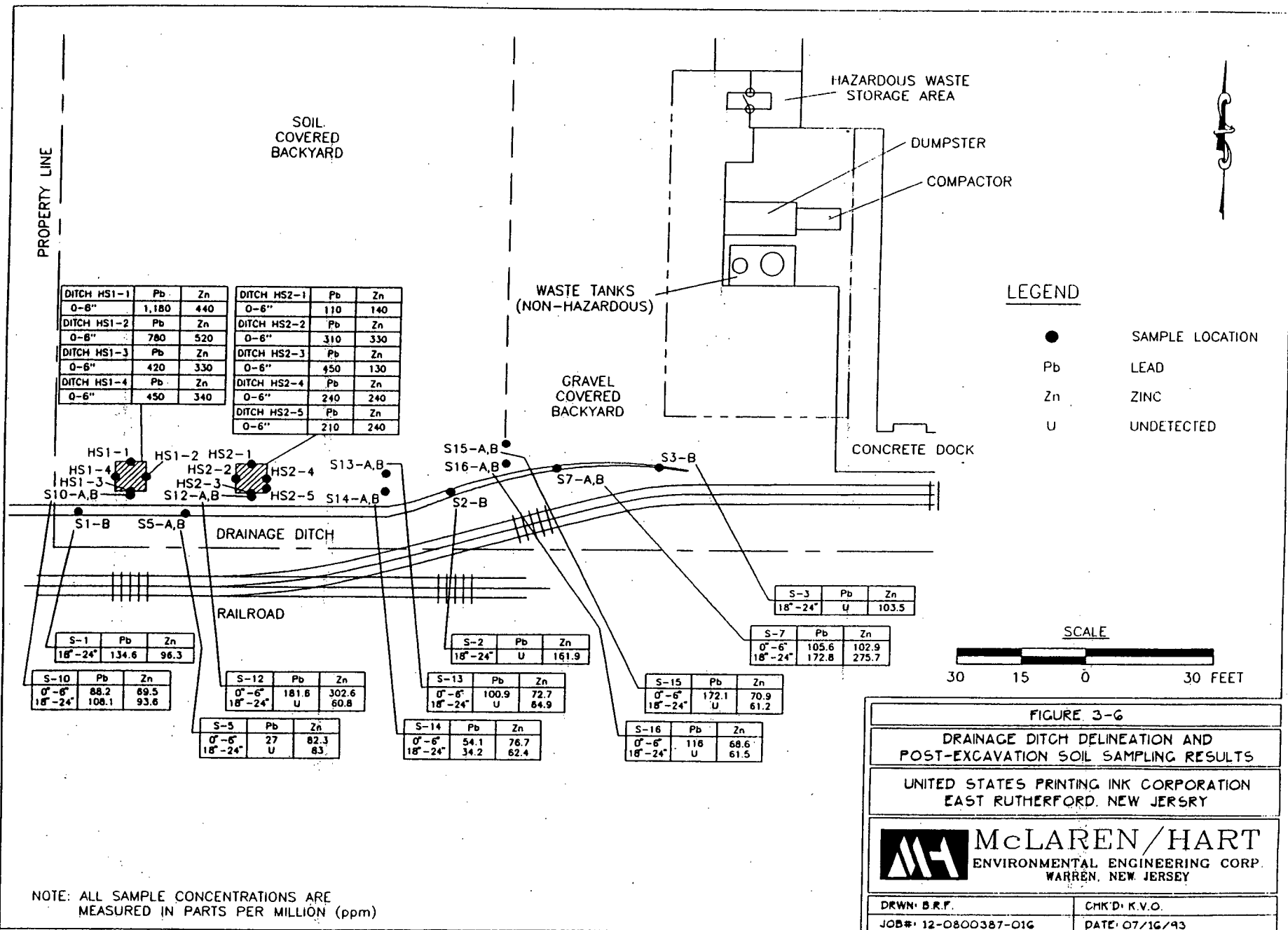


TABLE 1-1

**CHRONOLOGY OF DOCUMENTATION IN USPI ECRA CASE # 86834
UNITED STATES PRINTING INK**

DATE	USPI SUBMISSION	NJDEPE RESPONSE
October 21, 1986	General Information Submission	
January 6, 1987	Site Evaluation Submission (SES)	
March 12, 1987	SES Sampling Plan Submission	
March 20, 1989		Sampling Plan Approval
June 1989		Phase I Sampling Results Supplemental Sampling Plan
July 1989	Supplemental Sampling Plan Addendum	
March 13, 1990		Supplemental Sampling Plan Approval
July 1990	Phase II Supplemental Sampling Results	
December 17, 1990		Supplemental Sampling Plan Approval (soils and groundwater) Partial Cleanup Plan Approval (soils)
September 1991	Phase III Supplemental Sampling Results	
September 1991	Partial Soils Cleanup Final Report	
January, 1992	Cleanup Plan Amendment I	
April 9, 1992		Second Draft Cleanup Plan Approval
April 21, 1992	Revised Cleanup Plan Amendment II	
May 14, 1992		Cleanup Plan Approval Letter

TABLE 3-1
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS

Total Petroleum Hydrocarbons
Area : Transformer Area Excavation
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number			
		Transformer-1	Transformer-2	Transformer-3	Transformer-4
Total Petroleum Hydrocarbons	10,000	140	590	150	3,700

**TABLE 3-2A
DELINEATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS**

Base Neutrals

Area : Railroad Track Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number
		BD-2ADL(SS-1') ²
Acenaphthene	10,000	< 2.200
Anthracene	10,000	< 1.100
Benzo(b)fluoranthene	2.5	< 2.200
Benzo(a)anthracene	2.5	2.200
Benzo(a)pyrene	0.66	2.400
Benzo(k)fluoranthene	2.5	< 2.200
Benzo(ghi)perylene	2.5	1.300
Bis(2-chloroethyl)ether	3	NA ³
Bis(2-chloroisopropyl)ether	10,000	NA
Bis(2-ethylhexyl)phthalate	210	NA
Butylbenzyl phthalate	10,000	NA
Chrysene	2.5	1.200
Dibenz(a,h)anthracene	0.66	< 1.100
Di-n-butyl phthalate	10,000	NA
Di-n-octyl phthalate	10,000	NA
1,2-Dichlorobenzene	10,000	NA
1,3-Dichlorobenzene	10,000	NA
1,4-Dichlorobenzene	1,200	NA
3,3-Dichlorobenzidine	7	NA
1,3-Dichloropropene	5	NA
Diethyl phthalate	10,000	NA

TABLE 3-2A (continued)
POST-EXCAVATION SOIL SAMPLING RESULTS

Base Neutrals

Area : Soil Covered Backyard Stains

(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number
		BD-2ADL(SS-1 ¹) ²
Dimethyl phthalate	100,000	NA
2,4-Dinitrotoluene	4	NA
Fluoranthene	10,000	< 1.100
Fluorene	10,000	< 1.100
Hexachlorobenzene	2	NA
Hexachlorobutadiene	210	NA
Hexachlorocyclopentadiene	7,300	NA
Hexachloroethane	10,000	NA
Indeno(1,2,3-cd)pyrene	2.5	1.800
Isophorone	10,000	NA
Naphthalene	4,200	< 1.100
Nitrobenzene	520	NA
N-Nitrosodiphenylamine	590	NA
N-Nitrosodi-n-propylamine	0.66	NA
Pyrene	10,000	10.000
1,2,4-Trichlorobenzene	10,000	NA

1. Sample is referred to as SS-1 in MBT Laboratory package
2. EPA Method 8310 (HPLC) utilized to analyze the Carcinogenic Polynuclear Aromatic Hydrocarbons (CaPAHs)
3. NA - sample not analyzed for this compound using the HPLC method

TABLE 3-2B
DEMONSTRATION OF COMPLIANCE WITH SOIL CLEANUP STANDARDS
 Polycyclic Hydrocarbons in the Railroad Track Area
 (all results in mg/kg)

Sample Number ¹	<u>Benzo(a)pyrene</u>	Dibenz(a,h) anthracene
RR-1	<0.330	<0.330
RR-2	<0.330	<0.330
RR-3	<0.330	<0.330
RR-4	<0.330	<0.330
RR-5	<0.330	<0.330
RR-6	<0.330	<0.330
RR-7	<0.330	<0.330
RR-8	<0.330	<0.330
RR-9	<0.330	<0.330
RR-10	<0.330	<0.330
BD-2ADL (SS-1)	2.400	<1.100
Criteria 1 ²	P/0.368	P/0.2
Criteria 2	P/ < 6.6	P/ < 6.6
Criteria 3	P/1	P/1

¹ The ten post-excavation samples were used for averaging since these points are the only sample locations remaining in the railroad track area.

² NJDEPE Proposed Criteria:

- (1) - The arithmetic mean of the concentration of the contaminant in all soil samples in an area of concern is less than or equal to the applicable soil cleanup standard for that contaminant.
- (2) - No single soil sample exceeds the applicable soil cleanup level by a factor of more than 10.
- (3) - No more than 10% of the soil samples, or 1 sample if 2 to 10 samples, inclusively, are used, exceed the applicable soil cleanup standard.

P = Passing criteria

/# = Criteria value

TABLE 3-3A
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS

Base Neutrals

Area : Soil Covered Backyard Stains

(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number			
		SS1-1	SS1-2	SS1-3	SS1-4
Acenaphthene	10,000	<0.330	<0.330	<0.330	<0.330
Anthracene	10,000	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	2.5	<0.330	<0.330	<0.330	0.450
Benzo(a)anthracene	2.5	<0.330	<0.330	<0.330	<0.330
Benzo(a)pyrene	0.66	<0.330	<0.330	<0.330	<0.330
Benzo(k)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330
Benzo(ghi)perylene	2.5	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroethyl)ether	3	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroisopropyl)ether	10,000	<0.330	<0.330	<0.330	<0.330
Bis(2-ethylhexyl)phthalate	210	0.530	<0.330	0.640	0.480
Butylbenzyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330
Chrysene	2.5	<0.330	<0.330	<0.330	<0.330
Dibenz(a,h)anthracene	0.66	<0.330	<0.330	<0.330	<0.330
Di-n-butyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330
Di-n-octyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330
1,2-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330
1,3-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330
1,4-Dichlorobenzene	1,200	<0.330	<0.330	<0.330	<0.330
3,3-Dichlorobenzidine	7	<0.670	<0.670	<0.670	<0.670
1,3-Dichloropropene	5	<0.330	<0.330	<0.330	<0.330
Diethyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330
Dimethyl phthalate	100,000	<0.330	<0.330	<0.330	<0.330
2,4-Dinitrotoluene	4	<0.330	<0.330	<0.330	<0.330

TABLE 3-3A (continued)
POST-EXCAVATION SOIL SAMPLING RESULTS

Base Neutrals

Area : Soil Covered Backyard Stains
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number			
		SS1-1	SS1-2	SS1-3	SS1-4
Fluoranthene	10,000	<0.330	<0.330	<0.330	<0.330
Fluorene	10,000	<0.330	<0.330	0.550	<0.330
Hexachlorobenzene	2	<0.330	<0.330	<0.330	<0.330
Hexachlorobutadiene	210	<0.330	<0.330	<0.330	<0.330
Hexachlorocyclopentadiene	7,300	<0.330	<0.330	<0.330	<0.330
Hexachloroethane	10,000	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	2.5	<0.330	<0.330	<0.330	<0.330
Isophorone	10,000	<0.330	<0.330	<0.330	<0.330
Naphthalene	4,200	<0.330	<0.330	<0.330	<0.330
Nitrobenzene	520	<0.330	<0.330	<0.330	<0.330
N-Nitrosodiphenylamine	590	<0.330	<0.330	<0.330	<0.330
N-Nitrosodi-n-propylamine	0.66	<0.330	<0.330	<0.330	<0.330
Pyrene	10,000	<0.330	<0.330	<0.330	0.340
1,2,4-Trichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330
Total Petroleum Hydrocarbons	10,000	1,200	880	4,700	2,000

TABLE 3-3A (continued)
POST-EXCAVATION SOIL SAMPLING RESULTS

Base Neutrals

Area : Soil Covered Backyard Stains
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		SS2-1	SS2-2	SS2-3	SS2-4	SS2-5
Acenaphthene	10,000	<0.370	<0.330	<0.330	<0.330	<0.360
Anthracene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	2.5	1.300	1.400	1.100	0.780	0.620
Benzo(a)anthracene	2.5	<0.330	0.500	<0.330	<0.330	0.400
Benzo(a)pyrene	0.66	0.610	0.770	0.560	0.370	0.600
Benzo(k)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330	0.490
Benzo(ghi)perylene	2.5	0.360	0.530	0.360	<0.330	0.340
Bis(2-chloroethyl)ether	3	<0.330	<0.330	<0.330	<0.330	<0.360
Bis(2-chloroisopropyl)ether	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-ethylhexyl)phthalate	210	<0.330	1.200	0.620	0.510	0.560
Butylbenzyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Chrysene	2.5	0.380	0.690	0.340	<0.330	0.460
Dibenz(a,h)anthracene	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-butyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-octyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,2-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.360
1,3-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.360
1,4-Dichlorobenzene	1,200	<0.330	<0.330	<0.330	<0.330	<0.360
3,3-Dichlorobenzidine	7	<0.330	<0.670	<0.670	<0.670	<0.670
1,3-Dichloropropene	5	<0.740	<0.330	<0.330	<0.330	<0.330
Diethyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Dimethyl phthalate	100,000	<0.330	<0.330	<0.330	<0.330	<0.330

TABLE 3-3A (continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Base Neutrals
Area : Soil Covered Backyard Stains
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		SS2-1	SS2-2	SS2-3	SS2-4	SS2-5
2,4-Dinitrotoluene	4	<0.330	<0.330	<0.330	<0.330	<0.330
Fluoranthene	10,000	0.440	0.970	0.390	0.340	1.1
Fluorene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobenzene	2	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobutadiene	210	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorocyclopentadiene	7,300	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachloroethane	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	2.5	<0.330	0.560	<0.330	<0.330	<0.330
Isophorone	10,000	<0.330	<0.330	<0.330	<0.330	<0.360
Naphthalene	4,200	<0.330	<0.330	<0.330	<0.330	<0.330
Nitrobenzene	520	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodiphenylamine	590	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodi-n-propylamine	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Pyrene	10,000	0.840	1.500	0.810	0.650	1.3
1,2,4-Trichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.360
Total Petroleum Hydrocarbons	10,000	4,000	5,800	4,400	6,700	6,800

TABLE 3-3B
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS

Volatile Organics
Area : Soil Covered Backyard
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number			
		SS1-1	SS1-2	SS1-3	SS1-4
Acrylonitrile	5	<0.100	<0.100	<0.100	<0.100
Benzene	13	<0.005	<0.005	<0.005	<0.005
Bromodichloromethane	22	<0.005	<0.005	<0.005	<0.005
Bromoform	370	<0.005	<0.005	<0.005	<0.005
Bromomethane	1,000	<0.010	<0.010	<0.010	<0.010
Carbon Tetrachloride	4	<0.005	<0.005	<0.005	<0.005
Chlorobenzene	690	<0.005	<0.005	<0.005	<0.005
Chloroform	28	<0.005	<0.005	<0.005	<0.005
Chloromethane	1,000	<0.010	<0.010	<0.010	<0.010
Dibromochloromethane	1,000	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	1,000	<0.010	<0.010	<0.010	<0.010
1,2-Dichloroethane	24	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	940	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene (trans)	10,000	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene (cis)	1,500	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	1,000	<0.005	<0.005	<0.005	<0.005
Methylene Chloride	170	<0.005	<0.005	<0.005	<0.005
1,1,2,2-Tetrachlorethane	70	<0.005	<0.005	<0.005	<0.005
Tetrachloroethylene	37	<0.005	<0.005	<0.005	<0.005
Toluene	1,000	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	3,800	<0.005	<0.005	<0.005	<0.005

TABLE 3-3B (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Volatile Organics
Area : Soil Covered Backyard
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number			
		SS1-1	SS1-2	SS1-3	SS1-4
1,1,2-Trichloroethane	420	<0.005	<0.005	<0.005	<0.005
Trichloroethylene (TCE)	100	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	7	<0.010	<0.010	<0.010	<0.010
Xylenes (total)	6,300	<0.005	<0.005	<0.005	<0.005

TABLE 3-3B (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Volatile Organics
Area : Soil Covered Backyard
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		SS2-1	SS2-2	SS2-3	SS2-4	SS2-5
Acrylonitrile	5	<0.100	<0.100	<0.100	<0.100	<0.100
Benzene	13	<0.005	<0.005	<0.005	<0.005	<0.005
Bromodichloromethane	22	<0.005	<0.005	<0.005	<0.005	<0.005
Bromoform	370	<0.005	<0.005	<0.005	<0.005	<0.005
Bromomethane	1,000	<0.010	<0.010	<0.010	<0.010	<0.010
Carbon Tetrachloride	4	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorobenzene	690	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	28	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	1,000	<0.010	<0.010	<0.010	<0.010	<0.010
Dibromochloromethane	1,000	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	1,000	<0.010	<0.010	<0.010	<0.010	<0.005
1,2-Dichloroethane	24	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	940	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene (trans)	10,000	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene (cis)	1,500	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	1,000	<0.005	<0.005	<0.005	<0.005	<0.005
Methylene Chloride	170	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2,2-Tetrachlorethane	70	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethylene	37	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1,000	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane	3,800	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 3-3B (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Volatile Organics
Area : Soil Covered Backyard
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		SS2-1	SS2-2	SS2-3	SS2-4	SS2-5
1,1,2-Trichloroethane	420	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethylene (TCE)	100	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	7	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes (total)	6,300	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 3-4
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS

Base Neutrals
Area : Railroad Track Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		RR-1	RR-2	RR-3	RR-4	RR-5
Acenaphthene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Anthracene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)anthracene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)pyrene	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(k)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(ghi)perylene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroethyl)ether	3	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroisopropyl)ether	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-ethylhexyl)phthalate	210	<0.330	<0.330	<0.330	<0.330	<0.330
Butylbenzyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Chrysene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Dibenz(a,h)anthracene	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-butyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-octyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,2-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,3-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,4-Dichlorobenzene	1,200	<0.330	<0.330	<0.330	<0.330	<0.330
3,3-Dichlorobenzidine	7	<0.330	<0.330	<0.330	<0.330	<0.670
1,3-Dichloropropene	5	<0.330	<0.330	<0.330	<0.330	<0.330
Diethyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Dimethyl phthalate	100,000	<0.330	<0.330	<0.330	<0.330	<0.330

TABLE 3-4 (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Base Neutrals
Area : Railroad Track Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		RR-1	RR-2	RR-3	RR-4	RR-5
2,4-Dinitrotoluene	4	<0.330	<0.330	<0.330	<0.330	<0.330
Fluoranthene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Fluorene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobenzene	2	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobutadiene	210	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorocyclopentadiene	7,300	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachloroethane	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Isophorone	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Naphthalene	4,200	<0.330	<0.330	<0.330	<0.330	<0.330
Nitrobenzene	520	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodiphenylamine	590	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodi-n-propylamine	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Pyrene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,2,4-Trichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Total Petroleum Hydrocarbons	10,000	430	2,100	40	<20	100

TABLE 3-4 (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Base Neutrals
Area : Railroad Track Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		RR-6	RR-7	RR-8	RR-9	RR-10
Acenaphthene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Anthracene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)anthracene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)pyrene	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(k)fluoranthene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(ghi)perylene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroethyl)ether	3	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-chloroisopropyl)ether	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Bis(2-ethylhexyl)phthalate	210	<0.330	0.600	<0.330	<0.330	<0.330
Butylbenzyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Chrysene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Dibenz(a,h)anthracene	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-butyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Di-n-octyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,2-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,3-Dichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
1,4-Dichlorobenzene	1,200	<0.330	<0.330	<0.330	<0.330	<0.330
3,3-Dichlorobenzidine	7	<0.670	<0.330	<0.670	<0.670	<0.670
1,3-Dichloropropene	5	<0.330	<0.330	<0.330	<0.330	<0.330
Diethyl phthalate	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Dimethyl phthalate	100,000	<0.330	<0.330	<0.330	<0.330	<0.330

TABLE 3-4 (Continued)
POST-EXCAVATION SOIL SAMPLING RESULTS
Base Neutrals
Area : Railroad Track Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number				
		RR-6	RR-7	RR-8	RR-9	RR-10
2,4-Dinitrotoluene	4	<0.330	<0.330	<0.330	<0.330	<0.330
Fluoranthene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Fluorene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobenzene	2	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorobutadiene	210	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachlorocyclopentadiene	7,300	<0.330	<0.330	<0.330	<0.330	<0.330
Hexachloroethane	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	2.5	<0.330	<0.330	<0.330	<0.330	<0.330
Isophorone	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Naphthalene	4,200	<0.330	<0.330	<0.330	<0.330	<0.330
Nitrobenzene	520	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodiphenylamine	590	<0.330	<0.330	<0.330	<0.330	<0.330
N-Nitrosodi-n-propylamine	0.66	<0.330	<0.330	<0.330	<0.330	<0.330
Pyrene	10,000	0.410	0.410	<0.330	<0.330	<0.330
1,2,4-Trichlorobenzene	10,000	<0.330	<0.330	<0.330	<0.330	<0.330
Total Petroleum Hydrocarbons	10,000	110	2,100	170	530	130

TABLE 3-5
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH SOIL CLEANUP STANDARDS

Total Petroleum Hydrocarbons
Area : Drainage Ditch Excavation
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Sample Number						
		Ditch-1	Ditch-2	Ditch-3	Ditch-4	Ditch-5	Ditch-6	Ditch-7
Total Petroleum Hydrocarbons	10,000	50	50	6,400	<20	<20	200	460

**TABLE 3-6
POST-EXCAVATION SOIL SAMPLING RESULTS
COMPLIANCE WITH PROPOSED SOIL CLEANUP STANDARDS**

Lead and Zinc
Drainage Ditch Area
(all results in mg/kg)

Compound	NJDEPE Cleanup Level - 5/14/92 Letter	Compliance with NJDEPE Proposed Criteria			Sample Number				
		Criteria (1)	Criteria (2)	Criteria (3)	Ditch HS1-1	Ditch HS1-2	Ditch HS1-3	Ditch HS1-4	Ditch HS2-1
Lead	600	P/ 194.1	P/ <1,200	P/2	1,180	780	420	450	110
Zinc	1,500	P/ 180.3	P/ <3,000	P/0	440	520	330	340	140

Compound	Ditch HS2-2	Ditch HS2-3	Ditch HS2-4	Ditch HS2-5	S7-A	S7-B	S2-B	S5-A
Lead	310	450	240	210	105.6	172.8	<25	27
Zinc	330	130	240	240	102.8	275.7	161.9	82.3

Compound	S5-B	S1-B	S5-1A	S10-A	S10-B	S12-A	S12-B	S13-A
Lead	<25	134.6	35.2	88.2	108.1	181.6	<25	100.8
Zinc	83	96.3	86.6	69.5	93.6	302.6	60.8	72.7

Compound	S13-B	S14-A	S14-B	S15-A	S15-B	S16-A	S16-B	S3-B
Lead	<25	54.1	34.2	172.1	<25	116	<25	<25
Zinc	64.8	76.7	62.4	70.9	61.2	88.6	81.5	103.5

NJDEPE Proposed Criteria:

- (1) - The arithmetic mean of the concentration of the contaminant in all soil samples in an area of concern is less than or equal to the applicable soil cleanup standard for that contaminant.
- (2) - No single soil sample exceeds the applicable soil cleanup standard by a factor of more than: 2 for a standard greater than 100 ppm.
- (3) - No more than 10% of the soil samples, or 1 sample if 2 to 10 samples, inclusively, are used, exceed the applicable soil cleanup standard.

P = Passing criteria

/# = Criteria value

Table 3-7

REMEDIAL ACTION SUMMARY TABLE

DATE	ACTIVITY
December 1992	Permits are received from the Army Corps of Engineers and the NJDEPE.
January 1993 (1st week)	<p>Power washing equipment is mobilized and the Concrete Loading dock next to the Railroad Track Area is power washed and the waste waters collected for analyses and disposed.</p> <p>Railroad Construction removes the track work from the track area which will be remediated.</p> <p>McLaren/Hart mobilizes excavation and soil moving equipment to the Site.</p>
January 4, 1993	<p>Railroad Area excavation began. Soil stockpiled on plastic sheeting in a corner of the Soil Covered backyard.</p> <p>NJDEPE representative inspects and tours the Site. Four post excavation samples collected in Railroad area to be analyzed for PHC's and BNs.</p>
January 5, 1993	<p>Railroad Area and Transformer area excavations completed. Five additional samples were collected in Railroad area. Three post-excavation samples collected in Transformer area to be analyzed for PHCs. Soils stockpiled on plastic sheeting.</p> <p>Began Drainage Ditch excavation. Two samples were collected for PHC analysis. Soil stockpiled on plastic sheeting.</p> <p>Drainage Ditch localized excavations completed. Four samples were collected in Ditch Hot Spot 1 for Pb and Zn analysis. Soil stockpiled on plastic sheeting.</p>

Table 3-7 (Cont)

REMEDIAL ACTION SUMMARY TABLE

DATE	ACTIVITY
January 8, 1993	An additional sample is collected in Transformer area to be analyzed for PHCs. An additional five samples are taken in Drainage Ditch area to be analyzed for PHCs. Five samples were collected in Ditch Hot Spot 2 for Pb and Zn analysis. Wash water samples collected from power wash residue in drums to be analyzed for disposal.
January 9, 1993	Railroad excavation is filled with 4" stone and the area is graded. Waste classification samples were collected from the soils stockpiled in the backyard to be analyzed for RCRA hazardous waste characteristics.
January 11, 1993	All other excavations backfilled with clean sand. McLaren/Hart demobilizes equipment from the site.
July 1993	Resample BD-2.

ISRA Final Groundwater Cleanup Report
UNITED STATES PRINTING INK CORP.
EAST RUTHERFORD, NEW JERSEY
ISRA CASE #86834

Prepared For:

United States Printing Ink Corporation
343 Murray Hill Parkway
East Rutherford, New Jersey

Prepared By:

McLaren/Hart Environmental Corporation
25 Independence Boulevard
Warren, New Jersey 07059

January 1994

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- APPENDIX B:**
- 1) Well Abandonment Report for MW-2
 - 2) Monitoring Well Permit for MW-2B
 - 3) Monitoring Well Record for MW-2B
- APPENDIX C:**
- 1) Chain-of-Custody Form for Groundwater Sample at Monitoring Well MW-2B.
 - 2) Laboratory Results of Groundwater Sample at Monitoring Well MW-2B.
- APPENDIX D:** Soil Waste Classification Data

1.0 INTRODUCTION

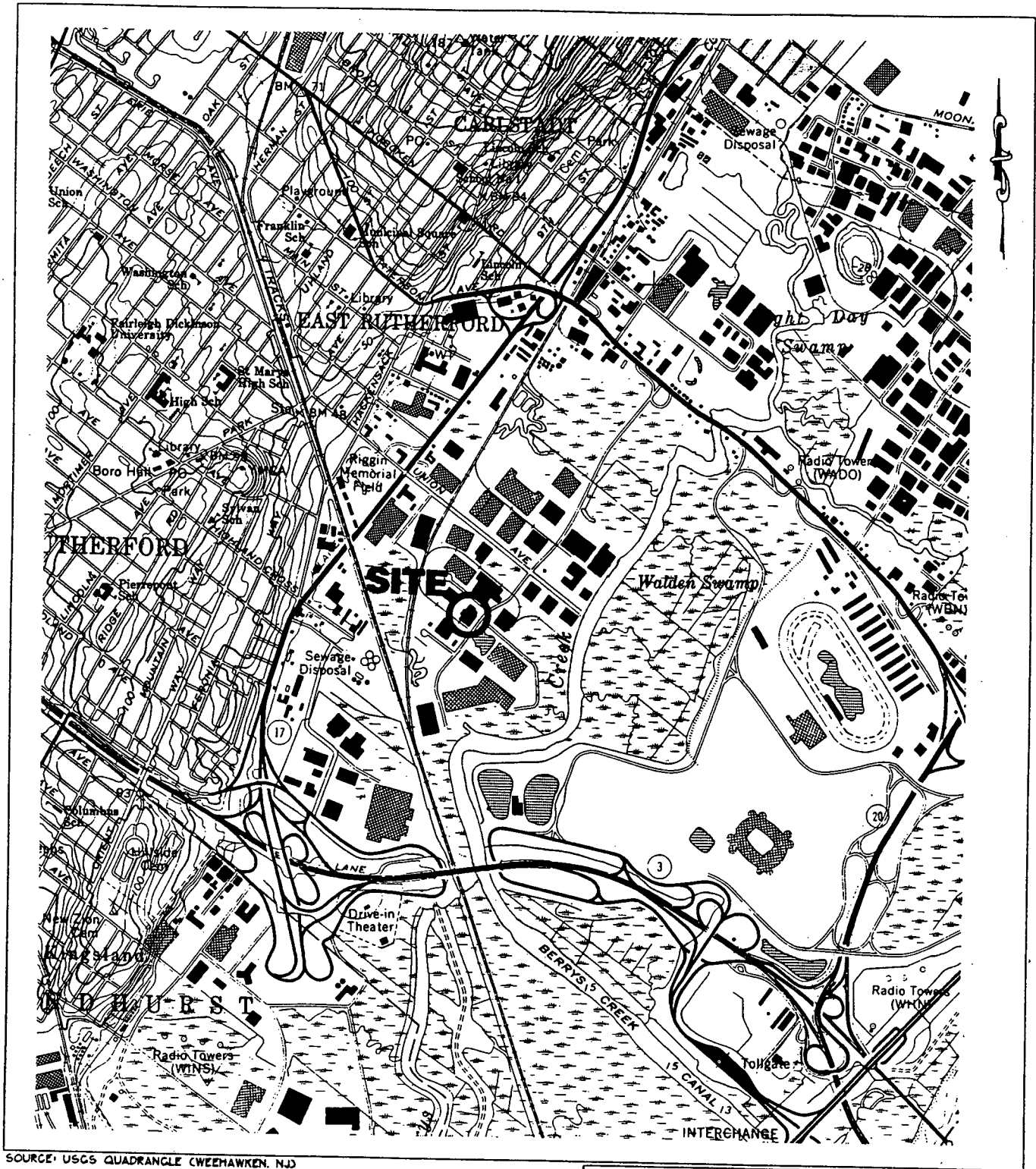
McLaren/Hart Environmental Engineering Corporation (McLaren/Hart) of Warren, New Jersey has prepared the enclosed Final Groundwater Cleanup Report for the United States Printing Ink Corporation (USPI) facility located in East Rutherford, New Jersey. This report is submitted on behalf of USPI in accordance with the requirements of the Cleanup Plan Approval Letter dated May 14, 1993 (Appendix A) and the requirements of the Industrial Site Rehabilitation Act (ISRA).

1.1 SITE DESCRIPTION AND LOCATION

The manufacturing and office building at USPI covers an area of 53,840 square feet. The site is shown on Figure 1-1, Site Location Map. Approximately 50,048 square feet of the facility is covered by macadam parking lots and 15,200 square feet is covered with crushed gravel (railroad unloading area and backyard storage area). The southern portion of the plant is bounded by a railroad spur which extends east-west and ends at Murray Hill Parkway. A drainage ditch is located adjacent to (and roughly parallel to) the back portion of the railroad spur. Murray Hill Parkway bounds the facility on the east side and Whelan Avenue bounds the facility on the northern side. A general site map including the areas of environmental concern is provided in Figure 1-2.

1.2 SITE HISTORY

On November 10, 1965, United States Printing Ink Corporation purchased an undeveloped tract of land for the production of web off-set and letter press inks. Operations at USPI began in 1967 after the construction of offices and a manufacturing building at the East Rutherford site.



SOURCE: USGS QUADRANGLE (C2E2HAWKEN, N.J.)

NEW
JERSEY

QUADRANGLE LOCATION

SCALE: 1" = 2000'

FIGURE 1-1

SITE LOCATION MAP

UNITED STATES PRINTING INK CORPORATION
EAST RUTHERFORD, NEW JERSEY



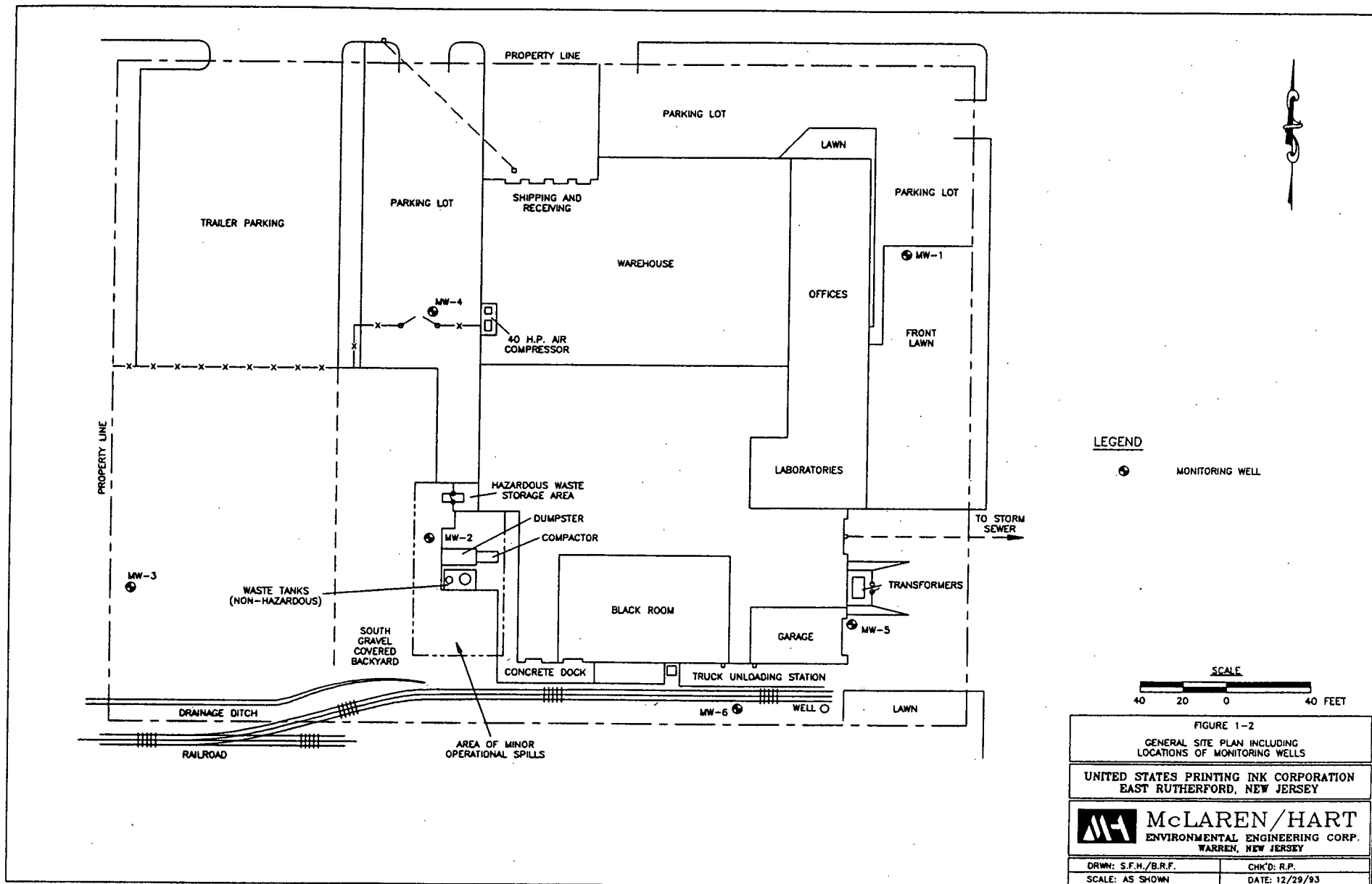
McLAREN/HART
ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: B.R.F.

CHK'D: R.P.

JOB#: 12-0000387-000-019

DATE: 12/29/93



In 1968, USPI was bought by Millmaster Onyx Corporation which was subsequently purchased by Kewanee Industries in 1976. Kewanee Industries was acquired by Gulf Oil Corporation in 1977. On December 22, 1982, Millmaster Onyx Group, Inc. acquired the USPI facility from Gulf Oil Corporation. During all changes in ownership, operations remained unchanged at the USPI facility.

USPI is a manufacturer of printing inks used primarily for the newspaper industry. Raw materials used prior to 1982 in the manufacturing of the printing inks included: naphthnic mineral oils, Michlers ketone and shellac.

1.3 PREVIOUS INVESTIGATIONS

The Phase I Sampling Plan investigation was conducted April 17 through April 19, 1989. This field investigation consisted of sampling soils and drainage ditch sediments to evaluate potential contamination on-site. Based on these analytical results, two general areas of environmental concern (AECs) were identified: the gravel covered backyard and the trailer loading area/transformer area. The results of this initial investigation are contained in the Hart Environmental Management Corporation (HART) June 1989 report.

The Phase II Supplemental Sampling Plan (SSP) investigation was conducted at the USPI facility from April 9 through April 13, 1990. This phase of the investigation included additional soil sampling and installation and sampling of six shallow groundwater monitoring wells. The goal of the SSP was to further define the vertical and horizontal extent of potential contamination in soils and groundwater at the USPI facility. Delineation activities focused on six detailed AECs: Area A (transformer area and east trailer loading area); Area B (gravel and soil covered backyards; hazardous waste storage area, dumpster, waste tanks, and compactor); Area #3 (railroad area); Area #4 (drainage ditch); Area #5 (front

lawn area); and Area #6 (west parking lot). Results of the Phase II Supplemental Sampling Plan are contained in the HART July 1990 report.

A Phase III Supplemental Sampling program was initiated on February 11, 1991. Soil sampling was conducted in accordance with the requirements set forth in the NJDEPE Partial Soils Cleanup Approval letter dated December 17, 1990. NJDEPE requirements for further delineation included additional soil sampling in Area #1 (transformer area), Area #2 (gravel covered backyard), and Area #4 (drainage ditch) and a supplemental round of groundwater sampling. Results of the Phase III investigation are discussed in the McLaren/Hart October 1991 Supplemental Sampling Plan Results Report. A summary of the correspondence and submittals are provided in Table 1-1.

1.4 FINAL GROUNDWATER CLEANUP REPORT SUMMARY

This Final Groundwater Cleanup Report is divided into 6 sections, which are identified below:

- 1.0 Introduction describes the site, site history, introduction and previous investigations.
- 2.0 Site Characteristics describes the geologic conditions at the Site.
- 3.0 Summary of Remediation Activities summarizes the groundwater remedial activities taken at and around monitoring well MW-2B (former MW-2) and the results of the groundwater sampling at MW-2B.
- 4.0 Waste Management describes the disposition of the soil generated during source removal activities.

5.0 **Remediation Costs** describes the costs associated with the remediation activities described in Section 3.0.

6.0 **Recommendations** describes the recommendations for the groundwater cleanup issues.

2.0 SITE CHARACTERISTICS

2.1 SITE SOILS AND GEOLOGY

2.1.1 Regional Geology

The USPI facility is underlain by reddish brown shales and fine-grained sandstones of the Late-Triassic Passaic Formation. Overlying the Passaic Formation are glacial tills comprised of reddish brown sandstone and shale clasts, and clays, silts, and sands of variable grain sizes. Overlying the glacial tills are lacustrine derived varved clays, interspersed with alluvial deposits of sand and silt. As the sea level rose, estuarine conditions extended into the valley in which the facility is located which resulted in the deposition of a highly organic silt and clay layer called "meadow mat". Overlying the meadow mat is a layer of fill which varies in thickness throughout the site. This fill has been emplaced and re-worked by man throughout the industrial development of this area.

2.1.2 Site Geology

Site specific data obtained during monitoring well installations indicate that the surface soils at the site are comprised primarily of sand and gravel fill. Fill at the site ranges in thickness from 4 feet at MW-2 to greater than 13 feet at MW-4. This material is directly underlain by a 1 to 4 foot thick layer of meadow mat throughout much of the site. No meadow mat or clay layer was encountered at location MW-4. The meadow mat is underlain by a grey silty clay which is encountered between 8 to greater than 13 feet below grade.

3.0 SUMMARY OF REMEDIATION ACTIVITIES

The NJDEPE required the following issues to be addressed as part of the conditionally approved Cleanup Plan letter dated, May 14, 1993 (Appendix A):

1. According to the response to the Draft Cleanup Plan approval, free product no longer exists in MW-2 and the proposal is to inspect the well on a biweekly basis. This proposal is acceptable. However, should free product reappear in MW-2 product bailing be implemented. The product in MW-2 is referred to as mineral oil. This well shall be resampled for BN+15 once product removal has been completed, if necessary.
2. During the free product skimming all other wells shall be inspected bi-weekly for free product. A record shall be kept of these inspections. Records shall also be kept on the free product recovery rate and total volume to date.
3. Following the removal of the free product the wells shall be left open for one month and inspected bi-weekly for free product. If no product appears in any of the wells, all wells may be sealed and the groundwater issues may be closed. If free product appears in any wells skimming shall resume.
4. Due to elevated BN MDLs in MW-2 and MW-7 (duplicate of MW-2), MW-2 shall be resampled for BN+15 within 30 days of receipt of this letter".

Below are details of the performance of the above listed remedial actions performed at the Site to comply with the NJDEPE conditional cleanup approval.

3.1 MONITORING THE WELLS

The 6 monitoring wells on site (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6) were inspected, and monitored biweekly for free product following the receipt of NJDEPE Conditional Approval. Free floating product (LNAPL) thickness measurements for monitoring wells MW-1, MW-3, MW-4, MW-5 and MW-6 are tabulated in Table 3-1. Monitoring well MW-4 was not accessible at this time to take the measurements. MW-4 was observed following source removal activities at which time there was no evidence of oil in this well.

There was no evidence of floating product or oil sheens in MW-1, MW-3, MW-4, MW-5 and MW-6 during these observations. A measurable thickness of LNAPL was detected only at monitoring well MW-2. LNAPL was bailed using a hand-bailer periodically from MW-2 until there was no further evidence of product. Groundwater level measurements, LNAPL thicknesses and the amounts of bailed out product at monitoring well MW-2 are tabulated in Table 3-2. It is shown in Table 3-2 that product removal was discontinued from February 1993 as there was no removable product in the well. Also, since July 29, 1993, following source removal activities at MW-2B no product has been observed in this well. Monitoring of product was discontinued in October 28, 1993 following the receipt of analytical data from the groundwater sample collected from MW-2B.

3.2 MONITORING WELL MW-2 ABANDONMENT

Monitoring well MW-2 was abandoned in place on July 12, 1993 in accordance with current NJDEPE well abandonment practices. The Well Abandonment Record is provided in Appendix B. This well was abandoned in order to allow access to this area for excavation as part of the planned oil source removal program. This program required the complete

removal of soil in the vicinity of MW-2, including MW-2 to thoroughly remove potential source material.

3.3 PRODUCT SOURCE REMOVAL

The product source removal program included a soil excavation program in the immediate vicinity of MW-2. The excavation included the abandoned well and the surrounding soils, approximately 40 cubic yards. These soils were staged adjacent to the previously stockpiled soils on-site. As per the planned and approved cleanup program, the excavation was visually inspected for the presence of oils. Once the excavation was deemed clean by the on-site engineer based on visual observations, clean fill material of similar composition to the soils removed was installed and compacted to the original grade.

3.4 MONITORING WELL MW-2B INSTALLATION AT FORMER MW-2 LOCATION

Upon completion of the source removal program, a new monitoring well (MW-2B) was installed on July 21, 1993 four feet to the west of former monitoring well MW-2. This well was installed in accordance with current NJDEPE well installation practices for wells in an unconsolidated formation. A well construction diagram (Figure 3-1), shows the construction details including screen-interval, total depth, diameter of casing, etc. A copy of the Monitoring Well Permit and the Monitoring Well Record for MW-2B are provided in Appendix B. Prior to collecting a groundwater sample, MW-2B was monitored for 6 weeks for evidence of product. During this monitoring only a sheen was observed on one occasion. No further evidence of measurable product was observed during this six-week period (Table 3-2).

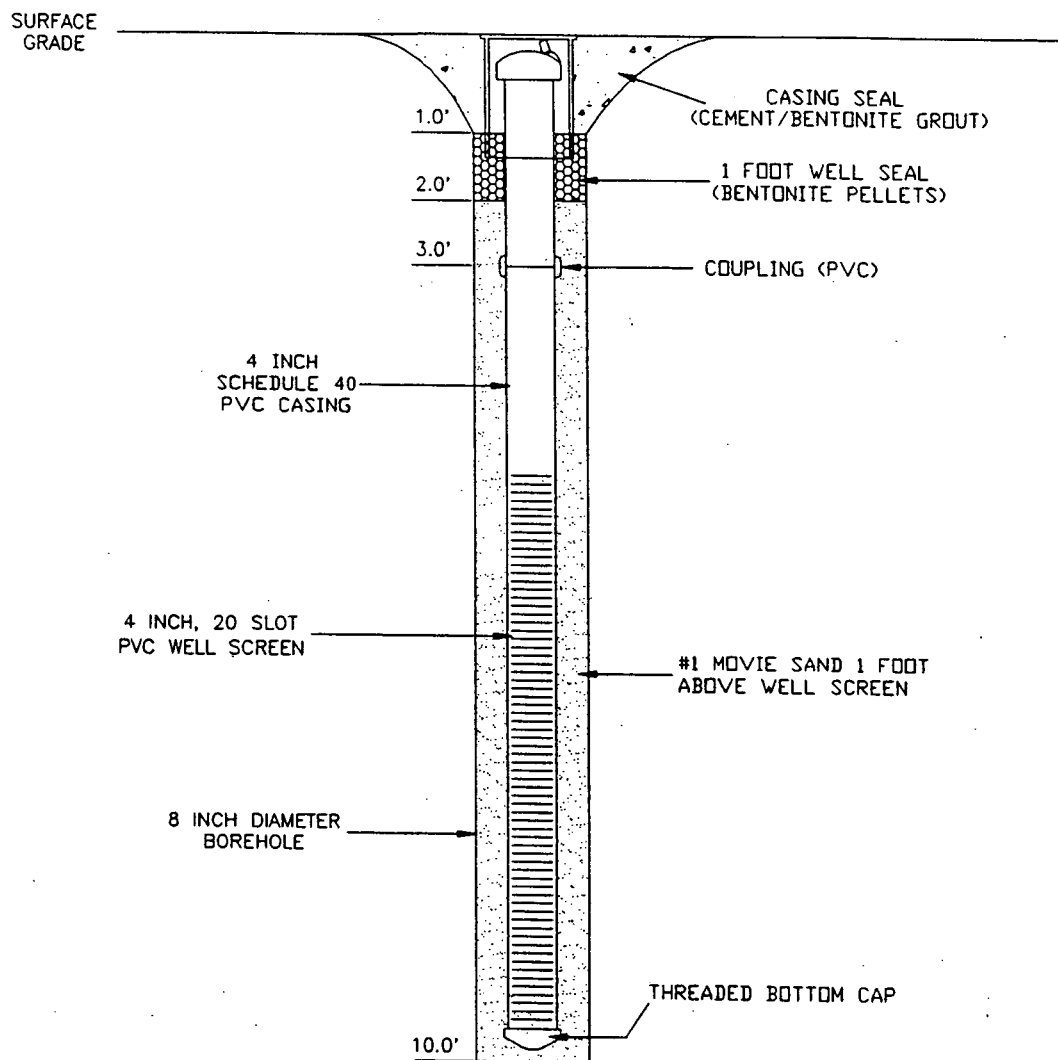


FIGURE 3-1

MONITORING WELL MW-2B
CONSTRUCTION DIAGRAM

UNITED STATES PRINTING INK CORPORATION
EAST RUTHERFORD, NEW JERSEY



McLAREN/HART
ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: B.R.F.

CHK'D: R.P.

JOB#: 12-0000387-000-019

DATE: 12/21/93

NOT TO SCALE

3.5 GROUNDWATER SAMPLE COLLECTION AT MONITORING WELL MW-2B

Following a six-week period of inspecting MW-2B for floating oil product and observing none, a groundwater sample was collected from the monitoring well on September 3, 1993 pursuant to the NJDEPE's May 14, 1993 letter. The sample was analyzed for base neutral compounds plus a library search (BN+15) using EPA method 8270. All the base neutral analytes were reported at concentrations below the respective reporting limit (BRL) with the exception of Naphthalene (3 ppb), 2-Methylnaphthalene (5 ppb), Phenanthrene (6 ppb) and Bis(2-Ethylhexyl) phthalate (44 ppb). These results are summarized in Table 3-3. A copy of the chain-of-custody and the laboratory results of the sample are attached in Appendix C.

4.0 WASTE MANAGEMENT (SOIL)

As discussed previously, waste characterization samples were collected from the excavated soil which is staged on-site. Four composite samples were collected from the combined 400 cubic yards of excavated soils. These samples were analyzed at Lancaster Laboratory (certification # 77443), a New Jersey Certified Laboratory, for a full TCLP scan. Based upon these results and the origin of the soils, the excavated soils were determined to be a non-hazardous.

Various recycling facilities were contacted and were provided with the waste characterization results. Upon review of these data, the facilities approved the disposal of this wastestream at their facilities. On June 23, 1993 an additional soil sample (STOCKPILE) was collected and was submitted to MBT Environmental Laboratories, Rancho Cordova, California (NJ certification # 44818). This sample was submitted to the laboratory for BTEX, PCB, flashpoint, percent (%) moisture, TOX, ignitability, TPH, and Paint Filter Liquid Tests to satisfy soil recycling analytical requirements. Upon selection of the recycling facility, a request was made on September 13, 1993 to the NJDEPE for a waste flow exemption for these soils. Receipt of this exemption will allow shipment of the soil to an out-of-state recycling facility which utilizes soils in a hot and cold asphalt manufacturing process.

All pertinent paper work concerning the shipment and recycling of these soils will be submitted to the NJDEPE in an addendum to the final soil cleanup report.

5.0 REMEDIAL ACTION COSTS

The total costs for completing the above described remediation work is approximately \$200,000. A summary of the remedial actions completed to date is provided in Table 3-4.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Upon completion of the source removal program in the vicinity of former MW-2, there was no visual evidence of free-phase product or stained soils in the walls or floor of the excavation. Once this area was restored to the original grade and MW-2B was installed to replace the former well MW-2, only a slight sheen was observed on one occasion in the newly installed well.

The groundwater sample collected from MW-2B six weeks after the source removal activities were completed had reported detections of four base neutral compounds. Three of the four reported compounds (i.e., naphthalene, 2-methylnaphthalene, and phenanthrene) were reported as estimated concentrations due to their detection at or below the MDL during the laboratory analysis. Bis(2-ethylhexyl)phthalate was reported at 44 ppb, just 14 ppb above the practical quantitation limit (PQL) for this compound. This compound is also a common laboratory and field contaminant and may be introduced to a sample during sample handling with latex and rubber gloves. No compounds were reported at concentrations above any of the current groundwater criteria standards. These analytical results suggest that the groundwater quality has not been adversely affected by previous occurrences of floating product. The data also suggests that the source removal activities were successful in removing the source of oil in the vicinity of MW-2B.

After reviewing the following:

- a) Results of the groundwater sample at MW-2B,
- b) Removal of the product source in the local soils,
- c) No reoccurrence of free product at MW-2B, and
- d) Absence of free product at all other monitoring wells (MW-1, MW-3, MW-4, MW-5 and MW-6),

McLaren/Hart recommends that the on-site monitoring wells (MW-1, MW-2B, MW-3, MW-4, MW-5, and MW-6), located at USPI facility be sealed and the groundwater issues be closed.